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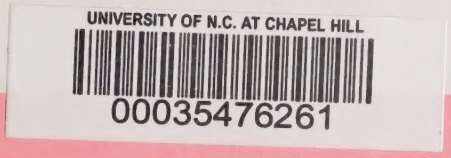

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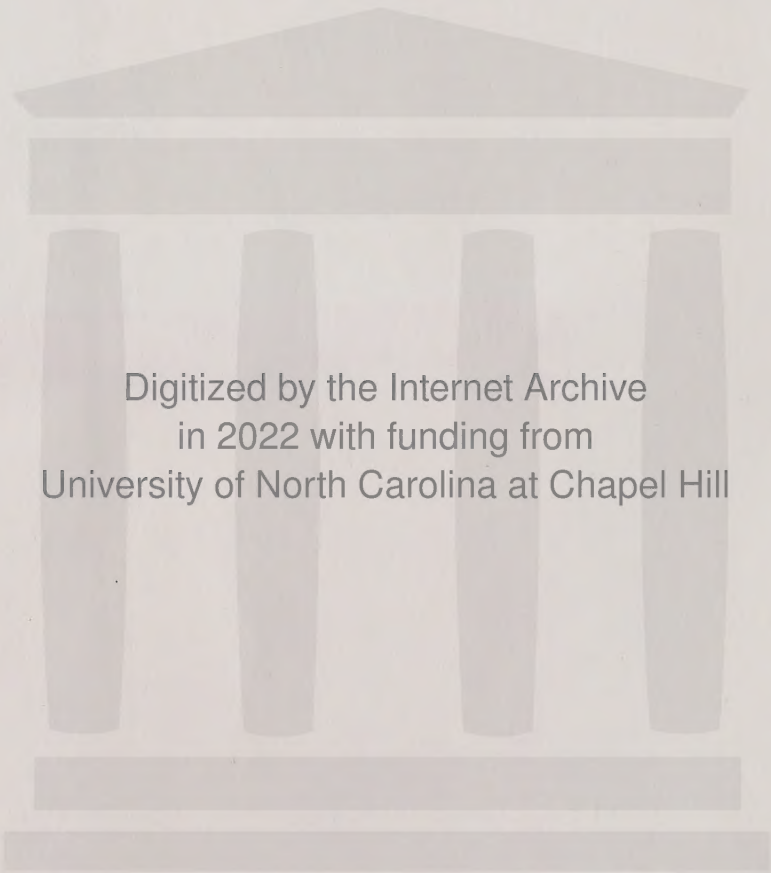

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SURRY COMMUNITY COLLEGE

ALOG

1966-1967

SURRY COMMUNITY COLLEGE

Surry Community College is a comprehensive public community college operating under the direction of the North Carolina Department of Community Colleges. The College has received "correspondent" status in the Southern Association of Colleges and Secondary Schools and is a member of the American Association of Junior Colleges.

BOX 304, DOBSON, NORTH CAROLINA 27017
TEL. 386-4955 (AREA CODE 919)

Surry Community College Bulletin, Volume 1, Number 1, 1966, Announcements for 1966-1967.

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COLLEGE FEE SCHEDULE - See Page 12

Changes mandated by State Board of Education and approved June 2, 1966. Other fees remain the same as listed on page 12.

Effective academic year beginning September 1966.

Tuition Charges	College Parallel Courses	Technical and Vocational Courses
State resident, full time 15 hrs. per quarter.....	$42.00	$32.00
State resident, part-time, less than 15 hrs. per qtr. (per qtr. hr.).	3.00	2.50
Out-of-state resident, full time, 15 hrs. per quarter.....	105.00	80.00
Out-of-state resident, part-time, less than 15 hrs. per quarter (per quarter hour).....	7.50	6.25

Omit Laboratory fees.

REFUND POLICY (Revised June 2, 1966 by State Board of Education). See page 9

Students who must withdraw from a class or a program must arrange to talk with the Dean of Student Personnel. Tuition refund for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds (2/3) of the student's tuition may be refunded if the student withdraws within ten (10) calendar days after the first day of classes as published in the school calendar. Tuition refunds will not be considered for tuitions of five dollars ($5.00) or less. If a course or curriculum fails to materialize, all the tuition shall be refunded.

COLLEGE CALENDAR

FALL QUARTER — 1966

September 19-20	Faculty meetings
September 21-22	Day program registration ..... 8:30 A.M.-4:30 P.M. Evening program registration ..... 7:00 P.M.-9:30 P.M.
September 23	Freshman Orientation
September 26	Classes begin — Day and Evening
September 26	Late registration fee applies
October 10	Last date for entering classes
October 24	Last date for dropping a course without academic penalty
November 7	Mid-term reports
November 24-25	Thanksgiving Holidays
November 28	Classes resume
December 13	Classes end
December 14, 15, 16, 19	Examinations and Evening Division registration
December 21, 22	Quarterly reports—preregistration

WINTER QUARTER — 1967

January 2	Day program registration ..... 8:30 A.M.-4:30 P.M. Evening program registration ..... 7:00 P.M.-9:30 P.M.
January 3	All classes begin
January 3	Late registration fee applies
January 17	Last date for entering classes
January 30	Last date for dropping a course without academic penalty
February 14	Mid-term reports
March 20	Classes end
March 21, 22, 23, 24	Examinations and Evening Division registration

*SPRING QUARTER — 1967

March 28	Day program registration ..... 8:30 A.M.-4:30 P.M. Evening program registration ..... 7:00 P.M.-9:30 P.M.
March 29	All classes begin
March 29	Late registration applies
April 12	Last date for entering classes
April 26	Last date for dropping a course without penalty
May 10	Mid-term reports
June 13	Classes end
June 14, 15, 16, 19	Examinations, Spring quarter ends *Spring recess to be announced

SUMMER QUARTER — 1967

June 19	Day registration only .. 8:30 A.M.-4:30 P.M.
June 20	Classes begin
June 20	Late registration applies
July 3, 4	Independence Day recess
July 5	Resume classes, Last day for entering classes
July 19	Last date for dropping a course without penalty
August 1	Mid-term reports
September 8	Classes end
September 11, 12	Examinations, Summer quarter ends
September 20	Fall quarter registration begins

SURRY COMMUNITY COLLEGE

BOARD OF TRUSTEES

	Term Expires
Robert S. Burrus, Chairman, Rockford	1967
Robert E. Merritt, Vice Chairman, Mount Airy	1969
Richard G. Chatham, Elkin	1969
Charles L. Folger, Dobson	1973
Thomas L. Folger, Mount Airy	1973
John P. Frank, Mount Airy	1971
Will I. Monday, Mount Airy	1967
Roxie B. Roth, Elkin	1969
Oscar W. Smith, Pilot Mountain	1971
David L. Webb, Mount Airy	1973
Howard O. Woltz, Jr., Mount Airy	1967
Robert A. Yarborough, Elkin	1971

ADMINISTRATIVE OFFICERS

President	I. John Krepick
Academic Dean	Robert E. Chilton
Dean of Student Personnel	George E. Stockton
Director of Adult Education and Extension	James H. Templeton
Chairman of Technical-Vocational Division	Paul E. Keicher

CLERICAL STAFF

Bookkeeper	Mrs. Betty Hemmings
Typist	Janice Hayden

COLLEGE AIMS AND OBJECTIVES

Surry Community College will strive to offer to its community a program to improve skills and develop an intellectual understanding of life. The education of the whole man—the development of all men and of all of man's capabilities—aesthetic, social, intellectual and manipulative—will be its goal.

Surry Community College, a two-year college sponsored by Surry County and established under the provision of Chapter 115A of the General Statutes assumes its responsibility to:

—prepare students who desire to transfer to other colleges, by providing them with an adequate preparation of two years of college credit courses.

—prepare those students who wish to qualify for technical occupations by providing them with a strong program of studies appropriate to the needs of the individual and the community.

—provide a program of vocational education for those desiring to upgrade themselves in their chosen vocation or who wish to learn new skills or a new trade.

—encourage students to participate in extracurricular activities to the end that service to the college community may be demonstrated and at the same time foster their own sense of development and well-being.

—provide varied educational programs for the adult members of the service area who wish to improve their personal efficiency, enrich their cultural lives, or develop basic education skills.

HISTORY

Long before the publications of the Carlyle Report citizens of Surry County became interested in establishing a community college in the area. In 1960, the Mount Airy Lions Club appointed a committee of five members to study the possibilities and to communicate with the Division of Higher Education in Raleigh. In 1962, the committee was expanded to include all major civic groups in the county.

Local newspapers and radio stations endorsed the project and expressed wholehearted approval. By May, 1963, interest in a community college had reached a point that a county-wide meeting was held in Dobson to discuss procedural steps. Following the meeting the Surry County Board of Commissioners and the Boards of Education of the Elkin City Schools, the Mount Airy City Schools, and the Surry County Schools endorsed the community college project. Steps were taken to initiate a county-wide study.

The Surry County Board of Commissioners appointed a Community College Steering Committee on August 5, 1963, composed of fourteen members. This committee voted unanimously to complete the county survey and to submit an application to the State Board of Education at its December meeting for a comprehensive community college for Surry County. The application was submitted and approved by the State Board on January 10, 1964. On November 2, 1964, Mr. I. John Krepick was elected President of the Surry Community College.

FACILITIES

Construction of College Facilities began in March, 1966, on a 46 acre site on Highway 601, less than a mile south of Dobson, North Carolina. The original campus will include three major structures—a science-technical building, shop building, and a learning resources building. These buildings will house classrooms, four shop areas, business and science labortories, learning laboratory, language laboratory, art and music studios, two lecture auditoriums, a completely furnished library, administrative offices, student and faculty lounge areas, a snack bar, and a book store. On-campus parking will be available.

LIBRARY

The library is an integral part of the College educational program and is administered in the belief that its resources play an important part in a student's education. The library collection will center on the various curricula offered and will be supplemented by books, and other materials of general interest. Study carrels, music listening alcoves, typewriter service room, microfilm reference collection, and tape recordings will provide students and faculty with educational aids.

GENERAL REGULATIONS

REQUIREMENTS FOR ADMISSION

Surry Community College follows an "open door" policy and does not impose restrictive standards for admission. Before any student is permitted to register for a class, however, he must take the School and College Ability Test (SCAT), a mathematics test, and an English test. A student with satisfactory scores will be permitted to enter the program of his choice. Where scores on tests indicate a lack of readiness to commence college-level work, the student will be assigned to refresher (non-credit) courses or to the learning laboratory. Most curricula require high school graduation or equivalent.

APPLICATION FOR ADMISSION

Any student who wishes to enroll in a program at the college should complete an application form and return it to the Dean of

Student Personnel. Upon receipt of the application, instructions regarding admission procedures will be mailed to the prospective student. The college encourages all applicants to submit applications well in advance of the beginning of the term in which the student desires to enroll. An early application assures adequate time for the processing of the student. Interviews may be required and arranged in order to discuss educational and vocational plans. The student must request his high school to submit a transcript of all previous work undertaken

REGISTRATION

Surry Community College will operate on a quarter system. One unit of credit is equal to one class hour meeting per week. Each quarter will be twelve weeks in length. Students who are pursuing a program of study must register at the beginning of each quarter. All fees and tuition charges must be paid at the time of registration.

COUNSELING AND TESTING

Educational, vocational, and personal counseling will be provided by the College. Counselors will assist students to plan programs, administer individual aptitude and such tests as may seem advisable.

A student who plans to transfer to a four-year college upon completion of the work at Surry Community College should inform his counselor of such plans at the time of his first interview. If possible, the student should indicate the institution to which he plans to transfer so that a program appropriate to the curriculum requirements of that institution might be developed.

PHYSICAL EXAMINATION

Every full-time student is required to have a physical examination prior to registration. Physical examination blanks can be secured from the office of the Dean of Student Personnel.

FRESHMAN ORIENTATION

The college will hold a freshman orientation session during the week preceding the opening of school in the fall. The purpose of the orientation program is to introduce the student to his new environment, and to acquaint him with the policies of the College. Every student is assigned a faculty advisor whose advice and counsel is available to him throughout his college career.

All entering students must attend the orientation program scheduled at the beginning of the first quarter. At these sessions the College program, activities, regulations, opportunities, and services will be explained to students. Tests for guidance and placement may be scheduled by the counseling staff.

STUDENT CONDUCT

The conduct of college students, both in and out of school, is expected to be that of any respectable adult in a public place. Students should consider at all times that the reputation of the institution depends in no small part upon their behavior. No long list of regulations and penalties should be necessary if each student abides by the rules of common courtesy and cooperation. The college reserves the right to dismiss any student who in its judgment conducts himself in a manner incompatible with the purposes of the college.

FINANCIAL AID

A limited number of scholarships are available at present time; however, more student aid is expected in the near future. Students desiring such aid should make this known when filing for admission application. High school guidance counselors should be consulted for additional information. Veteran benefits will be handled through Dean of Student Personnel office.

WITHDRAWAL

A student who withdraws is expected to confer with his advisor and clear through the office of the Dean of Student Personnel and the Business Office. Failure to withdraw officially results in automatic assignment of an "F" grade for the work attempted.

When a student withdraws officially before the end of the eighth week, a grade of WP or WF is assigned, depending on whether the work is passing or failing to that date. After 8 weeks an F is recorded.

CLASS ATTENDANCE

Absences are serious deterrent to good scholarship. Regular attendance is regarded as an essential part of the educational process. The student is expected to benefit by classroom discussion as well as his daily text assignment.

Although the college has made no provisions for excusing absences from classes, an occasional absence might be absolutely necessary. Such absences in no way lessen the student's responsibility for meeting the requirements of the class. It will be the student's responsibility to contact the instructor for any missed assignment.

REFUND POLICY

Students who must withdraw from a class or a program must arrange to talk with the Dean of Student Personnel. If the request is made before the end of the third week of the quarter and approved, the student will receive a refund amounting to ⅔ of the tuition paid. Registration fee is not refundable. No tuition is refundable after start of fourth week.

STUDENT ACTIVITIES

The social life of Surry Community College centers, in part, around the student organizations, departmental clubs, class organizations, recreation association, drama group, etc., provide varied activities in this area.

Activities and organization will be based on student needs and desires. Some of those under consideration for the current year will be: student council, men's recreation association, women's recreation association, student publications and subject matter clubs such as: business, Spanish, and radio.

STUDENT HOUSING

Students who desire temporary living accomodations in the vicinity of the College are responsibile for making their own arrangements to secure housing. The College will render limited assistance when possible in aiding students to make adequate preparation for accomodations.

The College maintains no facilities for the housing of students.

FOOD SERVICE

The College snack bar will provide light lunches and snacks throughout each day of operation. Schedules of hours will be posted.

BOOKS AND SUPPLIES

It will be the responsibility of each student to secure those text books and other supplies which may be required. Since those items may be used on the first day of classes, they should be purchased on the day of registration. The College Bookstore will be open during the hours of registration and at specified times thereafter.

VETERANS

Students enrolling at the Community College who wish to use educational benefits under one of the Government bills for veterans should make application to the local Veteran's Administration Office. Correspondence obtained or certificates granted should be discussed with the Dean of Student Personnel prior to registration for classes.

PHYSICAL EDUCATION AND ATHLETICS

All full-time college parallel students must complete two years of physical education to qualify for a associate degree at graduation. This program will be arranged to meet the interest and needs of the students, with emphasis on physical fitness and carryover activities.

Technology and vocational majors may elect physical education.

The College will sponsor intramural athletics and recreational activities for men and women as the need develops.

In so far as possible within budget limits and college policy a moderate program of intercollegiate sports will be scheduled. The College subscribes to the belief that an intramural athletics program will contribute to college life and develop esprit de corps among students, faculty and alumni.

SYSTEM OF GRADING

The following grading system is used at Surry Community College:

Letter	Numerical Equivalent	Description	Quality Points
A	93-100	Superior	4
B	85-92	Good	3
C	77-84	Average	2
D	70-76	Passing	1
F	Below 70	Failing	0
I	Incomplete		0
WP	Withdrawn (passing)		0
WF	Withdrawn (failing)		

EVENING DIVISION

The College operates an Evening Division for students and adults interested in pursuing a part-time program. College parallel, technical, and vocational courses are available to qualified students. Classes usually meet one night a week from 7:00 to 10:00 P.M. Evening Division bulletins are available in the College office. Interested students should contact Director of Student Personnel.

GENERAL ADULT EDUCATION DIVISION

This division uses off-campus public school facilities at night in providing a variety of educational opportunities especially planned to meet the needs of adults and out-of-school youths 18 years of age and over. Classes offered, however, are not for college credit. Opportunities are available for adults to obtain pre-high school and high school credit classes, home and family courses, and general interest subjects. Students who desire help in arranging a program consult the Director of Adult Education.

ADULT EXTENSION

Vocational-technical extension courses are part-time courses which do not lead to a diploma or degree, but may qualify for a certificate of completion. Enrollees normally attend training classes to improve competencies, increase skills and understandings. Business firms and industrial companies cooperate with the College Extension Division in offering courses to meet community needs. Classes are held in various county locations.

TUITION, FEES, AND OTHER EXPENSES

Tuition is set by the State Board of Education and is subject to change without notice. All students taking associate degree, certificate, or diploma programs must pay an annual registration fee of $2.00. All charges for tuition and fees are due and payable on the day of registration for classes. Check and money orders should be made payable to Surry Community College.

COLLEGE FEE SCHEDULE

Tuition Charges	College Parallel Courses	Technical and Vocational Courses
State resident, full time 15 hrs. per quarter	$ 40.00	$30.00
State resident, part-time, less than 15 hrs. per qtr.	2.67	2.00
Out-of-state resident, full time, 15 hrs. per qtr.	100.00	75.00
Out-of-state resident, part-time, less than 15 hrs. per qtr.	6.67	5.00
Registration fees paid each year, nonrefundable		2.00
Advance application payment fee (required from full time students following acceptance) will apply to tuition. (Non-refundable)		15.00
Activities fee, payable at registration, per quarter		4.00
Laboratory fees — See courses listed		1.00 to 3.00
Late registration fee (paid in addition to registration fee) Full time		5.00
Late registration fee (paid in addition to registration fee) Part time		2.00
Transcript fee (no charge for first copy)		1.00
Change of schedule (each add or drop)		1.00

Student Insurance Fee — **full time students** — cost to be determined (will provide coverage for medical care arising out of injury)

Cost of books and supplies, while varying somewhat according to course of study will be approximately $80 per year.

AUDITING COURSES

The auditing of courses is permitted by special arrangement of the Academic Dean and of the instructor involved. Regularly enrolled students may audit courses. Tuition and fees are the same as required credit courses. Part-time students may arrange to take courses and pay all required fees. Auditors receive no credit.

CHANGE IN CURRICULUM

There are times when a student's aptitude and interests may be better served by a change in program. Should a change be advisable the advisor should be consulted to explore possibilities which will serve the interests of the student.

If a change is recommended, final approval must be obtained from the divisional or departmental chairman.

RESIDENCE

To qualify for tuition as a resident of North Carolina, a student 21 years of age or older must certify his legal residence for at least six months preceding the date of his first enrollment. The legal residence of a person under 21 years is that of his parents, or legal guardian.

TRANSFER OF CREDIT

Courses taken at Surry Community College should transfer in grade and credit to the receiving institution as applicable to the curriculum for which such courses were intended. After completing two years of credit work at Surry Community College the student should be able to transfer with junior status provided his program parallels the pattern of the senior institution. Counselors will assist the student in course selection; however, it is the student's responsibility to familiarize himself with the catalog of the senior institution to which he will transfer.

TRANSFER STUDENTS

Students transferring from another college will be accepted at the discretion of the Admission Office.

A transfer student must also follow the procedure for admission. Each application will be treated upon its individual merit. Credit will be granted for work of at least "C" grade which is applicable to the program selected at this College. Credits earned at other institutions which are more than five years old may be accepted for transfer. Requests for evaluation of credit earned elsewhere must be made in writing and should be addressed to the Registrar.

ACADEMIC REGULATIONS

A student may be placed on probation, suspended, or dismissed if he fails to do satisfactory academic work or if he willfully abuses College regulations.

A student must maintain a C.Q.P.A. of 2.0 or better to be in good academic standing. Students who fail to do so are placed on probation, suspended or dismissed.

Student progress is measured by Quality Point Average, or Q.P.A.; the quality of work a student has done at the College through one or more quarters is reflected by his Cumulative Point Average, or C.P.A.

The Quality Point Average is calculated as follows:

1. Allowing 4 points for an A, 3 points for a B, 2 points for a C, 1 point for a D, and 0 points for an F, multiply the number of points equivalent to the letter grade received in each course by the number of credit hours for the course to arrive at the quality points earned in each course.
2. Divide the sum of the quality points by the total number of credit hours of work; the quotient represents the Quality Points Average for the semester.

The Cumulative Point Average is determined in the same manner as the Quality Point Average, except that all of the student's work at the College is taken into account.

SCHOLARSHIPS

The College has received word from civic and fraternal organizations assuring the establishment of a scholarship fund. Individuals, corporations, and foundations are planning to contribute financial aid in order that students who are academically qualified and deserving will be able to continue their studies.

The Dean of Student Personnel will provide detailed information.

ACADEMIC PROGRAMS

(Associate in Arts)

College Transfer

In the first two years of college students pursue a program of general education in the areas of humanities, social studies, science, and mathematics. In addition to areas mentioned above, students begin to specialize in work in their own particular fields of interest. Surry Community College provides quality instruction in these areas for transfer credit to senior institutions. The College also provides counseling to help students plan their program for transfer to the college or university of their choice. The student should consult the general regulations relative to admission requirements which apply to all students seeking admission to this College.

COLLEGE TRANSFER PROGRAMS

(Liberal Arts, Engineering and Science, Business Administration)

The Degree of Associate in Arts is conferred by the College when the student has received a minimum of 90 quarter hours credit* and has met the following requirements:

1. General Education Credits	Quarter Hours
Humanities	9
English 101, 102, 103	9
Mathematics	9
Science Sequence (Biology, Chemistry or Physics)	12
Social Science Sequence (plus one additional course)	12
Physical Education	6
Sub Total	57
2. Electives*	39
Total	96

To be decided upon jointly by the student and his advisor.

3. An over-all average of "C" on all courses.

*Should include foreign language when transfer to liberal arts institution is anticipated.

NOTES:

1. Ninety quarter hours excludes physical education credits. All students enrolled in college transfer programs must take six quarters of physical education unless cause be shown.

LIBERAL ARTS
(College Transfer)

First Year	Quarter Hours
English 101 - 102 - 103	9
History 101 - 102 - 103	9
Science Sequence (Biology, Chemistry, Physics)	12
Mathematics 105 - 106 or 101 - 102 - 103	9 - 10
Physical Education 101 - 102 - 103	3
Electives	5 - 6
	48

Second Year	
English 201 - 202	10
Social Science Electives	6
Fine Arts Electives	3
Physical Education 201 - 202 - 203	3
Electives	26
	48

NOTES:

1. Foreign language recommended for those students transferring to liberal arts institutions.

PRE-ENGINEERING CURRICULUM

(College Transfer)

First Year	**Quarter Hours**
English 101 - 102 - 103	9
History 101 - 102 - 103	9
Chemistry 101 - 102 - 103	12
Mathematics (Analytic Geometry, Cal. Sequence)	15
Physical Education 101 - 102 - 103	3
	48

Second Year	
English 204 or 205	5
Physics 101 - 102 - 103	12
Engineering Graphics I-II	6
Calculus III	6
Differential Equations	5
Economics 201 - 202 - 203	9
Physical Education 201 - 202 - 203	3
Electives	2
	48

NOTES:

1—Students should confer with advisor in planning program of studies.

2—This program is based on the assumption that pre-engineering students will offer four years of high school credits in mathematics. Any deficiency must be removed before above sequence is followed if junior standing in a four-year institution is desired.

3—Students deficient in high school foreign language credits must include prescribed number of credit hours in above program.

BUSINESS ADMINISTRATION

(College Transfer)

First Year	**Quarter Hours**
English 101 - 102 - 103	9
Science Sequence (Biology, Chemistry or Physics)	12
Mathematics 101 - 102 - 103 or 105 - 106	9 - 10
Social Science 101 - 102 - 103	9
Physical Education 101 - 102 - 103	3
Electives	5 - 6
	48

Second Year	
English 201 - 202	10
Social Science Electives	5 - 6
Economics 201 - 202 - 203	9
Accounting 131 - 132 - 133	9
Speech 101	3
Business Organization and Management	3
Physical Education 201 - 202 - 203	3
Electives	5 - 6
	48

NOTES:

1. Foreign language recommended for those students transferring to liberal arts institutions.

COURSES OF INSTRUCTION
COLLEGE TRANSFER

ART

C—ART 101—Art History I **3-0-3**

A general survey of art history against the background of Western culture. The arts of antiquity through Gothic, the periods are studied in relation to their political, religious, and social setting.

C—ART 102—Art History II **3-0-3**

The art and artists of Europe from the Renaissance to the present time.

C—ART 130—Introduction to Art **3-0-3**

A beginner's course for those interested in learning to look at, appreciate, and enjoy the visual arts. The elements used to create a work of art are studied through discussion, reference to art works of the past and present, and actual experimentation in the various art media.

BUSINESS ADMINISTRATION

C—BUSINESS 110—Business Organization and Management **3-0-3**

A survey of business practices and procedures in which the following topics are covered: the place of business in the community; business papers and forms; record keeping; office procedures; legal problems; selling; advertising; marketing; finance; banking and insurance; forms of business organization and consumer economic problems.

C—BUSINESS 131-132-133—Principles of Accounting **2-2-3**

Three Quarters continuous study

The application of accounting principles to single proprietorship is emphasized. Topics covered are journal entries, posting, trial balances, adjustments, worksheets, closing entries, simple statements, discounts, special journal and ledgers, controlling accounts, asset valuation, petty cash and voucher systems. Also accounting fundamentals as applied to partnerships and corporations. Additional topics covered are manufacturing accounts, statement analysis, budgets, and managerial uses of accounting data.

C—BUSINESS 111—Business Mathematics 3-0-3

The application of standard principles of mathematics to business situations includes markup, trade and cash discounts, interest, depreciation, installment credit, discounting negotiable instruments, payrolls, insurance, commissions, graphs, statistics.

ENGINEERING

C—ENGINEERING 105—Graphics for Engineers I 2-4-3

Instruction in the use of drafting instruments, freehand drawing, and lettering. Theory of projection, including orthographic multiviews, auxiliary views, and the various kinds of pictoral projections. Sectional views and conventional practices, dimensioning and notations. Representation and specification of threads and fasteners, gears and cams. Working drawings, including limits and tolerances. Concurrent enrollment in College Algebra or higher.

C—ENGINEERING 106—Graphics for Engineers II 2-4-3

Basic descriptive geometry; systematic solutions and analysis of the relationships of points, lines, and planes in space; developments and intersections. Applications of graphics to various fields of engineering. Vector geometry, graphic mathematics, and nomography. Concurrent enrollment in College Trigonometry or higher.

ENGLISH

C—ENGLISH 80—Reading Improvement 5-0-0

Designed for students desiring to improve comprehension, speed and vocabulary. Diagnostic tests, reading films, accelerators and tachistoscope are used, along with how-to-study materials. Tuition charge: same as for three-credit course.

C—ENGLISH 90—Refresher English (Grammar and Composition) 5-0-0

Designed for students who are deficient in writing skills or who would like to review the mechanics of writing. The course will review rudimentary grammar, punctuation, spelling, sentence structure, simple paragraph development and outlining. A few essays and short stories will be used. In computing tuition charges, this course will be considered comparable to a three-credit course.

C—ENGLISH 101—Freshman English I 3-0-3

This course is designed to help the student enrich his knowledge of English grammar, punctuation, sentence and paragraph building, and the use of the dictionary. These mechanics of English will be applied to short themes as required. Prerequisite: None.

C—ENGLISH 102—Freshman English II **3-0-3**

Winter and Spring Quarters

This course is a continuation of College English I, with frequent themes required. Conferences with individual students are recommended. There will be an introduction to principal literary forms by means of selections from modern authors and periodicals. Prerequisite: College English 101.

C—ENGLISH 103—Freshman English III **3-0-3**

This course emphasizes the development of good prose style and vocabulary development. Long themes, learning to use the dictionary, parallel reading, and a research paper will be required. Prerequisite: College English 102.

C—ENGLISH 201—Survey of English Literature **5-0-5**

A survey of English Literature from Beowulf to Blake. Emphasis will be placed upon the most outstanding and influential writers of the period, including Shakespeare, Chaucer, and Milton. Prerequisite: English 101-102-103.

C—ENGLISH 202—Survey of English Literature **5-0-5**

A continuation of English 201—from Wordsworth to the Twentieth Century. Prerequisite: English 101-102-103.

C—ENGLISH 203—Survey of American Literature **5-0-5**

A survey of American Literature from its beginning to 1900. Emphasis will be on reading rather than literary history. Prerequisite: English 101-102-103.

C—ENGLISH 204—Survey of American Literature **5-0-5**

A survey of American Literature from 1900 to the present. Emphasis will be on reading rather than literary history. Prerequisite: English 101-102-103.

C—SPEECH 101—Fundamentals of Speech I **3-0-3**

This course involves the study and application of the fundamentals of extemporaneous speaking. Consideration of the mechanics of speech is included, with emphasis on oral reading as a means of improving voice and articulation. The development of proficiency in public speaking is encouraged through an introduction to the informative speech, the persuasive speech and group discussion. Students use audio aids in weekly laboratory sessions at the Communication Center. Prerequisite: One quarter of Freshman English.

MATHEMATICS

C—MATHEMATICS—80 Developmental Algebra **No credit**

An intensive study of pre-college algebra designed for the purpose of providing a background in algebra and preparing the student for college-level mathematics. The class will meet five times per week.

C—MATHEMATICS—90—Developmental Geometry **No credit**

An intensive study of pre-college geometry for the purpose of preparing the student for college-level mathematics. The class will meet five times per week.

C—MATHEMATICS 101-102-103—College Mathematics I, II, III **3-0-3**

Designed for students who plan to limit their study of mathematics to the hours required for graduation, this course places as much emphasis on modern mathematical ideas and their meaning as on computation. Topics: the logic and methods of mathematics; the algebra of numbers as a deductive system; an introduction to the terminology and concepts of the algebra of classes; exponential number systems; measurement and approximation; numeric and graphic comparison of quantities; functional relationships and notation; limits and rate of change of functions; exponential, logarithmic and periodic functions; simple statistical methods. Continuous study, Fall, Winter, and Spring. (3 credits each quarter).

C—MATHEMATICS 105—College Algebra **5-0-5**

Designed to promote understanding of the logical structure of algebra and the development of algebraic techniques. Topics include: the theory of sets for integers, rational numbers, real numbers, complex numbers, mathematical induction, groups and fields, equations, inequalities, functions and their representation, systems of equations, matrices and determinants, theory of equations exponential and logarithmic functions, binomial theorem, permutations, combinations, probalility.

C—MATHEMATICS 106—Plane Trigonometry **5-0-5**

A study of analytic trigonometry, including trigonometry functions, identities, and equations, triangles, sine and cosine laws, logarithmic and inverse functions. Prerequisite: Mathematics 105.

C—MATHEMATICS 107—Analytic Geometry and Calculus **5-0-5**

An integrated course which together with Math 205-206-207, covers the usual five hours of analytic geometry and twelve hours of calculus. Prerequisite: Mathematics 106.

C—MATHEMATICS 205-206-207—

Analytic Geometry and Calculus II, III **5-0-5**

This three course sequence of five quarter hour course gives an integrated treatment of analytic geometry differential and integral calculus. (5 credits each quarter).

MUSIC

C—MUSIC 101—Introduction to Music **3-0-3**

A non-technical course in music appreciation. Musical elements such as rhythm, harmony, tone, color, and form are analyzed and discussed. Musical masterworks are employed to develop an understanding of the role of music in contemporary culture.

C—MUSIC 102—History of Music **3-0-3**

A non-technical course in music appreciation. The growth of music from its beginning to the Modern Era. Representative works of various composers and periods are presented for analysis and discussion.

PSYCHOLOGY

C—PSYCHOLOGY 101—General Psychology **5-0-5**

An introductory survey of psychology. Topics include pre- and post-natal development, the structure and functions of the nervous systems and glands, sensory organs and processes, intelligence, aptitudes and abilities, perception, motivation, learning, emotion, personality, and adjustment.

C—PSYCHOLOGY 201—Human Development **5-0-5**

Development of the normal child and adolescent, with consideration of the social, biological and cultural influences upon growth. Prerequisite: Psy. 101.

SCIENCE

C—BIOLOGY 101—Principles of Botany **3-3-4**

A study of the structure, growth, physiology, and economic importance of seed plants. (Note: Biology 101, 102, 103, constitutes a year sequence in biology).

C—BIOLOGY 102—General Zoology I **3-3-4**

A survey of the invertebrates with emphasis on structure, metabolism, behavior, and natural history of representative forms.

C—BIOLOGY 103—General Zoology II 3-3-4

Includes a brief survey of the chordates, the fundamentals of structure and function of the vertebrate body, and an introduction to embryology and genetics.

C—CHEMISTRY 101-102—General Chemistry I-II 3-3-4

A two quarter sequence of general college chemistry which along with chemistry 103 constitutes the first year of chemistry. (4 credits each quarter).

C—CHEMISTRY 103—Qualitative Analysis 3-3-4

A study of the qualitative analysis of the common cations and anions with emphasis upon solution chemistry and ionic equilibria. Prerequisite: Chem. 101-102.

C—PHYSICS 101—General Physics I 3-2-4

The first of a sequence of three courses in the fundamental principles of physics. Mechanics.

C—PHYSICS 102—General Physics II 3-2-4

The second course of the sequence. Heat, light, and sound.

C—PHYSICS 103—General Physics III 3-2-4

The third course of the sequence. Electricity and modern developments.

SOCIAL SCIENCE

C—HISTORY 101-102-103—History of Western Civilization 3-0-3
(Continuous Study)

The institution and culture of Western Society from 5,000 B.C. to the present. Topics include the pre-classical Greek and Roman worlds, the growth of Christianity, Medieval Europe, the Renaissance, the Reformation, the emergence of the modern national state, the rise of commercial Capitalism, the Industrial Revolution, the French Revolution, liberalism, nationalism, the alliance system, Imperialism, World War II and its aftermath, and the ideologies of the twentieth century. Prerequisite: None. (3 credits each quarter).

C—HISTORY 201-202-203—American History 3-0-3

A survey of American History from the period of discovery and colonization to the present. The course is conducted through lectures, text books, collateral readings, and map studies. Prerequisite: None. (3 credits each quarter).

C—ECONOMICS 201-202-203—Principles of Economics 3-0-3

A study of the present-day economic system; demand, supply, prices, and costs; wages, rent, interest, and profit; business cycles, money, banking, and the Federal Reserve System; international trade; and a comparison of Capitalism, Socialism, Communism, and Fascism. (3 credits each quarter).

C—GEOGRAPHY 201—Physical Geography 3-0-3

The earth's astronomical relations, factors of weather and climate, and physical features.

C—GEOGRAPHY 202—Economic Geography 3-0-3

Geographic factors involved in production, distribution, consumption, and conservation of the major crops, minerals, and industries of the world.

C—POLITICAL SCIENCE 201—American National Government 3-0-3

A study of the formation and development of the national government, its organization, functions and powers.

C—POLITICAL SCIENCE 202—
American State and Local Government 3-0-3

A study of the organization, functions, and powers of state and local government in the United States.

C—SOCIOLOGY 201—Introduction to Sociology 3-0-3

Analysis of the structure and function of social institutions and groups; the individuals' relationship to society.

SPANISH

C—ELEMENTARY SPANISH 101-102-103 3-3-3

The essentials of Spanish Grammar, vocabulary, and idioms, designed for the beginning Spanish student. Complete sequence must be taken before credit will be given. Prerequisite: None. (3 credits each quarter).

C—INTERMEDIATE SPANISH 151-152-153 3-3-3

A review of Spanish Grammar and idioms covering advanced principles open to students with two high school units of Spanish or the equivalent. Recitation three hours and laboratory two hours. (3 credits each quarter).

C—ADVANCED SPANISH 201-202-203 3-3-3

Advanced composition, oral work and reading of selections from Spanish literature. Designed particularly to give practical experience in speaking Spanish. Recitation three hours and laboratory two hours. Prerequisite: Spanish 151-152-153. (3 credits each quarter).

COLLEGE TECHNICAL DIVISION

(Associate in Applied Science)

The courses of study are designed to prepare students with technical competence for immediate employment in a specific commercial or vocational area. These programs require two years of full time study leading to the (A.A.S.) Associate in Applied Science degree.

Business Options:

- General Business Management
- Executive Secretarial
- Technical Secretarial
- Agricultural Business

Technical Options:

- Electronics Technology
- Drafting and Design Technology

GENERAL BUSINESS MANAGEMENT

PURPOSE OF CURRICULUM

In North Carolina the opportunities in business are increasing. With the increasing population and industrial development in this State, business has become more competitive and automated. Better opportunities in business will be filled by students with specialized education beyond the high school level. The General Business Management Curriculum is designed to prepare the student for employment in one of many occupations common to business. Training is aimed at preparing the student in many phases of administrative work that might be encountered in the average business.

The specific objectives of the Business Management Curriculum are to develop the following competencies:

1. Understanding of the principles of organization and management in business operations.
2. Understanding our economy through study and analysis of the role of production and marketing.
3. Knowledge in specific elements of accounting, finance, and business law.
4. Understanding of human skill in effective communication for business.
5. Knowledge of human relations as they apply to successful business operations in a rapidly expanding economy.

JOB DESCRIPTION

The graduate of the Business Management Curriculum may enter a variety of career opportunities from beginning sales person or office clerk to manager trainee. The duties and responsibilities of this graduate vary in different firms. These encompassments might include: making up and filing reports, tabulating and posting data in various books, sending out bills, checking calculations, adjusting complaints, operating various office machines, and assisting managers in supervising. Positions are available in businesses such as advertising; banking; credit; finance; retailing; wholesaling; hotel, tourist, and travel industry; insurance; transportation and communication.

GENERAL BUSINESS MANAGEMENT

SUGGESTED CURRICULUM BY QUARTERS

Course Title			Hours Per Week		Quarter Hours
FIRST QUARTER			**Class**	**Lab**	**Credit**
T-ENG	101	Grammar	3	0	3
T-BUS	102	Typewriting (or Elective)	2	3*	3
T-MAT	110	Business Mathematics	5	0	5
T-BUS	101	Introduction to Business	5	0	5
T-ECO	102	Economics	3	0	3
			18	3	19
SECOND QUARTER					
T-ENG	102	Composition	3	0	3
T-BUS	120	Accounting	5	2	6
T-ECO	103	Economics	3	0	3
T-BUS	115	Business Law	3	0	3
T-BUS	123	Business Finance	3	0	3
			[illegible]	[illegible]	[illegible]
THIRD QUARTER					
T-ENG	103	Report Writing	[illegible]	[illegible]	[illegible]
T-BUS	124	Business Finance	3	0	3
T-BUS	110	Office Machines	[illegible]	2	3
T-BUS	121	Accounting	5	2	[illegible]
T-BUS	116	Business Law	3	0	3
			10	4	18

			Hours Per Week		Quarter Hours
FOURTH QUARTER			**Class**	**Lab**	**Credit**
T-ENG	204	Oral Communication	3	0	3
T-BUS	232	Sales Development	3	0	3
T-EDP	104	Introduction to Data Processing System	3	2	4
T-BUS	239	Marketing	5	0	5
		Elective	3	0	3
			17	2	18

FIFTH QUARTER

T-ENG	206	Business Communication	3	0	3
		Social Science Elective	3	0	3
T-BUS	243	Advertising	3	2	4
T-BUS	235	Business Management	3	0	3
		Elective	3	0	3
			15	2	16

SIXTH QUARTER

		Social Science Elective	3	0	3
T-BUS	229	Taxes	3	2	4
T-BUS	272	Principles of Supervision	3	0	3
T-BUS	271	Office Management	3	0	3
		e	6	0	
			18	2	19

may be chosen from College Parallel or Technical pro-

"Manipulative laboratory" involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

GENERAL BUSINESS MANAGEMENT

COURSE DESCRIPTIONS BY QUARTERS

Course Title	Hours Per Week		Quarter Hours
FIRST QUARTER	**Class**	**Lab**	**Credit**
T-ENG 101 Grammar	3	0	3

Designed to aid the student in the improvement of self-expression in grammar. The approach is functional with emphasis on grammar, diction, sentence structure, punctuation, and spelling. Intended to stimulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life. Prerequisite: None.

T-BUS 102 Typewriting	2	3*	3

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Prerequisite: None.

T-MAT 110 Business Mathematics	5	0	5

This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business. Prerequisite: None.

T-BUS 101 Introduction to Business	5	0	5

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management. Prerequisite: None.

T-ECO 102 Economics	3	0	3

The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large. Prerequisite: None.

SECOND QUARTER

T-ENG 102 Composition	3	0	3

Designed to aid the student in the improvement of self-expression in business and technical composition. Emphasis is on the sentence, paragraph and whole composition. Prerequisite: T-ENG 101

T-BUS 120 Accounting 5 2 6

Principles, techniques and tools of accounting, for understanding of the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned. Prerequisite: T-MAT 110

T-ECO 104 Economics 3 0 3

Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income, international trade and finance, and current economic problems. Prerequisite: T-ECO 102

T-BUS 115 Business Law 3 0 3

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies. Prerequisite: None.

T-BUS 123 Business Finance 3 0 3

Financing of business units, as individuals, partnerships, corporations, and trusts. A detailed study is made of short-term, long-term, and consumer financing. Prerequisite: None.

THIRD QUARTER

T-ENG 103 Report Writing 3 0 3

The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum. Prerequisite: T-ENG 102

T-BUS 124 Business Finance 3 0 3

Financing, federal, state, and local government and the ensuing effects upon the economy. Factors affecting supply of funds, monetary and credit policies. Prerequisite: T-BUS 123

T-BUS 110 Office Machines 2 2 3

A general survey of the business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard machines, and calculator. Prerequisite: None.

T-BUS 121 Accounting 5 2 6

Partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems. Prerequisite: T-BUS 120

T-BUS 116 Business Law 3 0 3

Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership-corporation, mortgages, and property rights. Prerequisite: T-BUS 115

FOURTH QUARTER

T-ENG 204 Oral Communication 3 0 3

A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective oral presentation. Particular attention given to conducting meetings, conferences, and interviews. Prerequisite: T-ENG 101

T-BUS 232 Sales Development 3 0 3

A study of retail, wholesale and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for an execution of sales demonstrations required. Prerequisite: None

T-EDP 104 Introduction to Data Processing Systems 3 2 4

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detail study of particular computer problems. This course is a prerequisite for all programming courses. Prerequisite: None

T-BUS 239 Marketing 5 0 5

A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing processes. Prerequisite: None

FIFTH QUARTER

T-ENG 206 Business Communication 3 0 3

Develops skills in techniques in writing business communications. Emphasis is placed on writing action—getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgements, remittances, and inquiry. Prerequisite: T-ENG 102

T-BUS 243 Advertising 3 2 4

The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals; product and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media. Prerequisite: None

T-BUS 235 Business Management 3 0 3

Principles of business management including overview of major functions of management, such as planning, staffing, controlling, directing, and financing. Clarification of the decision-making function versus the operating function. Role of management in business—qualifications and requirements. Prerequisite: None

SIXTH QUARTER

T-BUS 229 Taxes 3 2 4

Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise, and inheritance. Prerequisite: T-BUS 121

T-BUS 272 Principles of Supervision 3 0 3

Introduces the basic responsibilities and duties of the supervisor and his relationship to supervisors, subordinates, and associates. Emphasis on securing an effective work force and the role of the supervisor. Methods of supervision are stressed. Prerequisite: None

T-BUS—271 Office Management 3 0 3

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems. Prerequisite: None

SECRETARIAL — EXECUTIVE

PURPOSE OF CURRICULUM

The demand for better qualified secretaries in our ever-expanding business world is becoming more acute. The purpose of this curriculum is to outline a training program that will provide training in the accepted procedures required by the business world and to enable persons to become proficient soon after accepting employment in the business office.

The Executive Secretary Curriculum is designed to offer [illegible] students the necessary secretarial skills in typing, dictation, transcription and terminology for employment in the business world. The secretarial training in secretarial subjects is supplemented by related courses in mathematics, accounting, business law, and personality development.

JOB DESCRIPTION

The graduate of the Executive Secretary Curriculum should have a knowledge of business terminology, skill in dictation and accurate transcription of business letters and reports. The graduate may be employed as a stenographer or a secretary. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, or reports. The secretary, in addition to taking dictation and transcribing, is given more responsibility in connection with meeting office callers, screening telephone calls, and being an assistant to an executive. She may enter a secretarial position in a variety of offices in businesses such as insurance companies, banks, marketing institutions, and financial firms.

SECRETARIAL — EXECUTIVE

Course Title			Hours Per Week		Quarter Hours
FIRST QUARTER			**Class**	**Lab**	**Credit**
T-ENG	101	Grammar	3	0	3
T-BUS	102	Typewriting (Or Elective)	2	3*	3
T-MAT	110	Business Mathematics	5	0	5
T-BUS	101	Introduction to Business	5	0	5
T-BUS	106	Shorthand (Or Elective)	3	2	4
			—	—	—
			18	5	20

SECOND QUARTER

T-ENG	102	Composition	3	0	3
T-BUS	103	Typewriting (Or Elective)	2	3*	3
T-BUS	107	Shorthand	3	2	4
T-BUS	120	Accounting	5	2	6
T-BUS	115	Business Law	3	0	3
			16	7	19

THIRD QUARTER

T-ENG	103	Report writing	3	0	3
T-BUS	104	Typewriting	2	3*	3
T-BUS	108	Shorthand	3	2	4
T-BUS	110	Office Machines	2	2	3
T-BUS	112	Filing	3	0	3
			13	7	16

FOURTH QUARTER			Hours Per Week Class	Lab	Quarter Hours Credit
T-ENG	204	Oral Communication	3	0	3
T-BUS	206E	Dictation and Transcription (Executive)	3	2	4
T-BUS	205	Advanced Typewriting	2	3*	3
T-BUS	211	Office Machines	2	2	3
T-EDP	104	Introduction to Data Processing Systems	3	2	4
			13	9	17

FIFTH QUARTER

T-ENG	206	Business Communication	3	0	3
T-BUS	207E	Dictation and Transcription (Executive)	3	2	4
T-BUS	214	Secretarial Procedures	3	2	4
		Social Science Elective	3	0	3
		Elective	6	0	6
			18	4	20

SIXTH QUARTER

		Social Science Elective	3	0	3
T-BUS	208E	Dictation and Transcription (Executive)	3	2	4
T-BUS	271	Office Management	3	0	3
		Elective	6	0	6
			15	2	16

Electives may be chosen from College Parallel or Technical programs.

* "Manipulative laboratory" involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

COURSE DESCRIPTION BY QUARTERS

FIRST QUARTER			**Hours Per Week** Class	Lab	**Quarter Hours Credit**
T-ENG	101	Grammar	3	0	3

Designed to aid the student in the improvement of self-expression in grammar. The approach is functional with emphasis on grammar, diction, sentence structure, punctuation, and spelling. Intended to stimulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life. Prerequisite: None

T-BUS	102	Typewriting	2	3*	3

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Prerequisite: None

T-MAT	110	Business Mathematics	5	0	5

This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business. Prerequisite: None

T-BUS	101	Introduction to Business	5	0	$

A survey of the business world with particular attention devoted to the structure of the various types of business organizations, methods of financing, internal organization, and management. Prerequisite: None

T-BUS 106 Shorthand 3 2 4

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases. Prerequisite: None

SECOND QUARTER

T-ENG 102 Composition 3 0 3

Designed to aid the student in the improvement of self-expression in business and technical composition. Emphasis is on the sentence, paragraph and whole composition. Prerequisite: T-ENG 101

T-BUS 103 Typewriting 2 3* 3

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms. Prerequisite: T-BUS 102 or the equivalent. Speed requirement, 30 words per minute for five minutes.

T-BUS 107 Shorthand 3 2 4

Continued study of theory with greater emphasis on dictation and elementary transcription. Prerequisite: T-BUS 106 or the equivalent.

T-BUS 120 Accounting 5 2 6

Principles, techniques and tools of accounting, for understanding of the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned. Prerequisite: T-MAT 110

T-BUS 115 Business Law 3 0 3

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies. Prerequisite: None

THIRD QUARTER

T-ENG 103 Report Writing 3 0 3

The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum. Prerequisite: T-ENG 102

T-BUS Typewriting 2 3* 3

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms. Prerequisite: T-BUS 103 or the equivalent. Speed requirement, 40 words per minute for five minutes.

T-BUS 108 Shorthand 3 2 4

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription. Prerequisite: T-BUS 107

T-BUS 110 Office Machines 2 2 3

A general survey of the business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and calculator. Prerequisite: None

T-BUS 112 Filing 3 0 3

Fundamentals of indexing and filing, combining theory and practice by the use of miniature letters, filing boxes and guides. Alphabetic, Triple Check, Automatic, Geographic, Subject, Soundex, and Dewey Decimal filing. Prerequisite: None

FOURTH QUARTER

T-ENG 204 Oral Communication 3 0 3

A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective oral presentation. Particular attention given to conducting meetings, conferences, and interviews. Prerequisite: T-ENG 101

T-BUS 206E Dictation and Transcription 3 2 4

Develops the skill of taking dictation and of transcribing at the typewriter materials appropriate to the course of study, which includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 100 words per minute required for five minutes on new material.

Prerequisite: T-BUS 108

T-BUS 205 Advanced Typewriting 2 3* 3

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation, and the typing of reports, manuscripts and legal documents. Prequisite: T-BUS 104. Speed requirement, 50 words per minute for five minutes.

T-BUS 211 Office Machines 2 2 3

Instructions in the operation of the bookkeeping-accounting machines, duplicating equipment, and the dictating and transcribing machines. Prerequisite: T-BUS 110

T-EDP 104 Introduction to Data Processing Systems 3 2 4

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detail study of particular computer problems. This course is a prerequisite for all programming courses. Prerequisite: None

FIFTH QUARTER

T-ENG 206 Business Communication 3 0 3

Develops skills in techniques in writing business communications. Emphasis is placed on writing action—getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgements, remittances, and inquiry. Prerequisite: T-ENG 102

T-BUS 207E Dictation and Transcription 3 2 4

Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 110 words per minute required for five minutes on new material. Prerequisite: T-BUS 206

T-BUS 214 Secretarial Procedures 3 2 4

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims. Prerequisite: None

SIXTH QUARTER

T-BUS	208E	Dictation and Transcription	3	2	4

Principally a speed building course, covering materials appropriate to the course of study, with emphasis as well as accuracy. Minimum dictation rate of 120 words per minute required for five minutes on new material. Prerequisite: T-BUS 207

T-BUS	271	Office Management	3	0	3

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems. Prerequisite: None

AGRICULTURAL BUSINESS

PURPOSE OF CURRICULUM

Rapid technological changes in farming and related agricultural businesses have given rise to the need for more technically trained people. A variety of agricultural businesses and industries employ persons to assist in marketing, processing, and distributing of farm products and providing services to the farmer. Many responsible positions in agricultural businesses and industries require technical training not available in high schools or in four-year colleges.

Agricultural production is undergoing tremendous changes. The trends are to larger, highly mechanized and specialized farms with huge capital investments. This means that there will be an increasing demand for capable farm managers to coordinate the purchasing, production and marketing of these larger agricultural production operations.

Farm managers of the future must possess greater technical competence to remain in the highly competitive production phase of agriculture. They must be able to cope with present production problems and adapt to rapid technological changes.

It is anticipated that changes in agriculture and the general economic environment will occur at a faster rate in the future. Profitable management of agricultural operations will demand successful adjustment to these changes. Decisions involved in these adjustments will require an individual with more training, knowledge and ability.

The Agricultural Business Curriculum is designed to help students acquire knowledge, understanding, and abilities in the broad field of agricultural business, including agricultural production. It

combines knowledge of agriculture with business training to prepare the graduate for many of the varied employment opportunities in agriculture. The specific objectives of the Agricultural Business Curriculum are to develop the following student competencies:

1. Understanding of the principles of organization and management in agricultural businesses and industries.
2. Understanding of the application of the principles of business management to agricultural production, and the abilities essential to the management of an efficient well-organized farming operation.
3. Understanding of the basic principles of our economic system, marketing, credit, price concepts and governmental policies and programs relating to agriculture.
4. Understanding of the agricultural sciences most essential to the production and marketing of agricultural products, including knowledge of the animal, plant, and soil sciences and their relationships with ability to apply these educational experiences to practical problems of agricultural business and industry.

JOB DESCRIPTION

As agricultural business and industry firms expand in size and number they are experiencing rapid changes in technologies of production, sales, and management, in an increasing competitive environment. Future employees of such firms must be prepared to understand these changes and adapt themselves accordingly. Successful completion of this curriculum should enable a person to assume responsibilities in an agricultural firm and should enable him to advance within such a business.

Upon graduation from this curriculum an individual should qualify for various jobs in agricultural business and industry such as salesman or store manager in farm supply stores; agricultural field serviceman; salesman, demonstrator or plant manager of feed and food companies; farm products inspector; salesman, or office managers of farm products marketing firms.

The trend towards larger farming operations with increased nonfarm control of production means there will be greater employment opportunities for well-trained individuals who can efficiently and profitably supervise the production and marketing of agricultural products.

AGRICULTURAL BUSINESS
SUGGESTED CURRICULUM BY QUARTERS

Course Title			Hours Per Week		Quarter Hours
FIRST QUARTER			**Class**	**Lab**	**Credit**
T-ENG	101	Grammar	3	0	3
T-BUS	101	Introduction to Business	5	0	5
T-MAT	110	Business Mathematics	5	0	5
T-AGR	125	Animal Science	5	2	6
			18	2	19

SECOND QUARTER

T-ENG	102	Composition	3	0	3
T-AGR	185	Soil Science and Fertilizers	5	2	6
T-BUS	120	Accounting	5	2	6
T-AGR	104	Introduction to Agricultural Economics	3	2	4
			16	6	19

THIRD QUARTER

T-ENG	103	Report Writing	3	0	3
~~T-BUS~~	~~119~~	~~Office Machines~~	~~2~~	~~2~~	~~3~~
T-BUS	121	Accounting	5	2	6
T-AGR	170	Plant Science	5	2	6
			15	6	18

			Hours Per Week		Quarter Hours
FOURTH QUARTER			**Class**	**Lab**	**Credit**
T-ENG	204	Oral Communication	3	0	3
T-BUS	123	Business Finance	3	0	3
T-BUS	232	Sales Development	3	0	3
T-AGR	204	Farm Business Management	5	2	6
		Elective*	0	0	3
			14	2	18

FIFTH QUARTER

T-AGR	205	Agricultural Marketing	5	2	6
T-AGR	201	Agricultural Chemicals	5	2	6
		Social Science Elective	3	0	3
		Elective*	0	0	3
			13	4	18

SIXTH QUARTER

T-AGR	228	Livestock Diseases and Parasites	3	2	4
T-AGR	218	Agricultural Mechanization	3	2	4
		Social Science Elective	3	0	3
		Elective*	0	0	5
			9	4	16

* At least six hours of electives should be in agricultural courses.

AGRICULTURAL BUSINESS
COURSE DESCRIPTIONS BY QUARTERS

Course Title			Hours Per Week		Quarter Hours
FIRST QUARTER			Class	Lab	Credit
T-ENG	101	Grammar	3	0	3

Designed to aid the student in the improvement of self-expression in English. The approach is functional with emphasis on grammar, diction, sentence structure, punctuation, and spelling. Intended to stimulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life. Prerequisite: None

T-BUS 101 Introduction to Business 5 0 5

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management. Prerequisite: None

T-MAT 110 Business Mathematics 5 0 5

This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business. Prerequisite: None

T-AGR 125 Animal Science 5 2 6

An introductory animal science course covering the fundamental principles of livestock production. A study of the animal body and the basic principles of reproduction, genetics, growth, fattening, digestion, along with the selection, feeding, improvement, processing and marketing of livestock. Prerequisite: None

SECOND QUARTER

T-ENG 102 Composition 3 0 3

Designed to aid the student in the improvement of self-expression in business and technical composition. Emphasis is on the sentence, paragraph and whole composition. Prerequisite: T-ENG 101

T-AGR 185 Soil Science and Fertilizers 5 2 6

A course dealing with basic principles of efficient classification, evaluation, and management of soils; care, cultivation, and fertilization of the soil, and conservation of soil fertility. Prerequisite: None

T-BUS 120 Accounting 5 2 6

Principles, techniques and tools of accounting, for understanding of the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned. Prerequisite: T-MAT 110

T-AGR 104 Introduction to Agricultural Economics 3 2 4

An introduction to economics, the functions of the economic system and agriculture's role in the economy. A review of the functions of the manager and an introduction to the principles he uses in making decisions to adjust to changing conditions. Analysis of the main sources of change which affect agricultural firms. Prerequisite: None

THIRD QUARTER

T-ENG 103 Report Writing 3 0 3

The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum. Prerequisite: T-ENG 102

T-BUS 110 Office Machines 2 2 3

A general survey of the business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and calculator. Prerequisite: None

T-BUS 121 Accounting 5 2 6

Partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems. Prerequisite: T-BUS 120

T-AGR 170 Plant Science 5 2 6

An introductory general botany and crop science course covering the fundamental principles of the reproduction, growth, functions, and development of seed bearing plants with application to certain commercially important plants in North Carolina. Prerequisite: None

FOURTH QUARTER

T-ENG 204 Oral Communication 3 0 3

A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective oral presentation. Particular attention given to conducting meetings, conferences, and interviews. Prerequisite: T-ENG 101

T-BUS 123 Business Finance 3 0 3

Financing of business units, as individuals, partnerships, corporations, and trusts. A detailed study is made of short-term, long-term, and consumer financing. Prerequisite: None

T-BUS 232 Sales Development 3 0 3

A study of retail, wholesale and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for and execution of sales demonstrations required. Prerequisite: None

T-AGR 204 Farm Business Management 5 2 6

A review of the functions of the manager of a business firm and the problems he faces. Development of the concept of planning by both partial and complete budgeting. Review of the concepts of costs and the length of run in production. Practice in preparing enterprise budgets as an aid in choosing what to produce. Use of partial budgeting to find the least cost production procedure. Analysis of production data to select the level of production that yields the most net revenue. Relationship between size, efficiency and income of a farm. Review of procedures for evaluating the efficiency of the manager. Prerequisite: T-AGR 104

FIFTH QUARTER

T-AGR 205 Agricultural Marketing 5 2 6

An analysis of the functions of marketing in the economy and a survey of the problems marketing faces. A review of the market structure and the relationship of local, terminal, wholesale, retail and foreign markets. Problems in the operations of marketing firms including buying and selling, processing, standardization and grading, risk taking and storage, financing, efficiency, and cooperation. Discussion of procedures of marketing such commodities as grain, cotton, livestock and tobacco. Prerequisite: T-AGR 104

T-AGR 201 Agricultural Chemicals 5 2 6

A study of farm chemical pesticides, their ingredients, formulation, and farm application, with emphasis on the effective and safe use of chemicals in agricultural pest control. Prerequisite: None

SIXTH QUARTER

T-AGR 228 Livestock Diseases and Parasites 3 2 4

A course dealing with the common diseases and parasites of livestock; sanitation practices and procedures with emphasis on the cause, damage, symptoms, prevention and treatment of parasites and diseases, and management factors relating to disease and parasite prevention and control. Prerequisite: T-AGR 125

T-AGR 218 Agricultural Mechanization 3 2 4

A study of farm machinery management and labor-saving devices. The economics of selection and operation of farm machinery. Study and evaluation of feed grinders, and mixers, storage facilities, materials handling systems and other labor-saving devices. Prerequisite: None

TECHNICAL DIVISION

DRAFTING AND DESIGN

PURPOSE OF CURRICULUM

This curriculum was prepared for the purpose of outlining a training program for students of mechanical drafting and design technology. There are certain identifiable duties which are common to all technicians of this general classification and which comprise the basic areas of technical knowledge they need. This curriculum has been designed for training persons in the accepted performance of these basic duties that will be assigned, and to enable the individual student to become proficient in a short time after he becomes employed in the industry.

Courses in general education have been included to give a student the assurance and understanding that comes with education upon a broad base. The technician associates with many levels of thought and expression—administrative personnel, scientists, engineers, skilled workmen—and must be able to communicate effectively with all levels. Courses containing essential information from related subject areas, such as mathematics, physics, and mechanics have been included in order to provide the student a better academic base for his training. Emphasis is placed upon ability to think and plan, as well as drafting procedures and techniques.

JOB DESCRIPTION

Mechanical drafting and design technicians are concerned with the preparation of drawings for design proposals, for experimental models and items for production use.

These technicians perform many aspects of drafting in a specialized field, such as the developing of the drawing of a section, sub-assembly or major component. Investigating design factors and availability of material and equipment, production methods and facilities are frequent assignments. They assist in the design of units and controls from specifications by utilizing drawings of existing units and reports on functional performance. They may draw components in industrial fields based on engineers' original design concepts or specific ideas. Also, they may be assigned as coordinators for the execution of related work of other designs, production, tooling, material and planning groups. Technicians with experience in this classification may often supervise the preparation of working drawings.

These technicians are employed in many types of manufacturing, fabrication, research development and service industries. Substantial numbers also are employed in communications, transportation, public utilities, consulting engineering firms, and federal, state, and local governments.

DRAFTING AND DESIGN — MECHANICAL

SUGGESTED CURRICULUM

Course	Title	Hours Per Week Class	Lab	Quarter Hours Credit
FIRST QUARTER				
T-ENG 101	Grammar	3	0	3
T-MAT 101	Technical Mathematics	5	0	5
T-PHY 101	Physics: Properties of Matter	3	2	4
T-DFT 101	Technical Drafting	0	6*	2
T-MEC 101	Machine Process	0	6*	2
		11	14	16
SECOND QUARTER				
T-ENG 102	Composition	3	0	3
T-MAT 102	Technical Mathematics	5	0	5
T-PHY 102	Physics: Work, Energy, Power	3	2	4
T-DFT 102	Technical Drafting	0	6*	2
T-MEC 102	Machine Processes	0	6*	2
		11	14	16
THIRD QUARTER				
T-ENG 103	Report Writing	3	0	3
T-MAT 103	Technical Mathematics	5	0	5
T-PHY 103	Physics: Electricity	3	2	4
T-PHY 106	Applied Mechanics	5	0	5
T-DFT 103	Technical Drafting	0	6*	2
		16	8	19
FOURTH QUARTER				
T-ENG 204	Oral Communication	3	0	3
T-DFT 201	Technical Drafting	2	6*	4
T-DFT 204	Descriptive Geometry	2	4	4
T-MEC 205	Strength of Materials	3	2	4
T-MEC 210	Physical Metallurgy	3	3*	4
		13	15	19

FIFTH QUARTER

		Social Science Elective	3	0	3
T-DFT	205	Design Drafting I	2	6*	4
T-DFT	211	Mechanisms	3	2	4
T-MEC	211	Physical Metallurgy	3	3*	4
		Elective			4
			11	11	19

SIXTH QUARTER

		Social Science Elective	3	0	3
T-DFT	206	Design Drafting II	2	6*	4
T-MEC	235	Hydraulics and Pneumatics	3	3*	4
		Elective			4
		Elective			4
			8	9	19

* "Manipulative laboratory" involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

ELECTRONICS TECHNOLOGY

PURPOSE OF CURRICULUM

The field of electronics has developed at a rapid pace since the turn of the century. For many years the major concern of electronics was in the area of communications. Developments during World II and in the period since have revolutionized production techniques. New industries have been established to supplement the need and demand for electronics equipment.

Many opportunities exist for men and women with a technical education in electronics. This curriculum provides a basic background in electronic related theory with practical applications of electronics for business and industry. Courses are designed to develop competent electronics technicians who may take their place as an assistant to an engineer, or as a liaison between the engineer and the skilled craftsman.

JOB DESCRIPTION

The electronics technician may start in one or more of the following areas: research, design, development, production, maintenance or sales. He may be an assistant to an engineer, an engineering aide, laboratory technician, supervisor or equipment specialist. His training is similar to that of an engineer, but in less depth and more practical in application. He can function as a liaison between an engineer and the skilled craftsman.

ELECTRONICS

SUGGESTED CURRICULUM

Course		Title	Hours Per Week Class	Lab	Quarter Hours Credit
FIRST QUARTER					
T-ENG	101	Grammar	3	0	3
T-MAT	101	Technical Mathematics	5	0	5
T-PHY	101	Physics: Properties of Matter	3	2	4
T-DFT	101	Technical Drafting	0	6*	2
T-ELC	101	Fundamentals of Electricity	4	4-6	6
			15	12-14	20
SECOND QUARTER					
T-ENG	102	Composition	3	0	3
T-MAT	102	Technical Mathematics	5	0	5
T-PHY	102	Physics: Work, Energy, Power	3	2	4
T-DFT	102	Technical Drafting	0	6*	2
T-ELC	102	Fundamentals of Electricity	4	4-6	6
			[illegible]		
THIRD QUARTER					
T-ENG	103	Report Writing	[illegible]	0	3
T-MAT	103	Technical Mathematics	[illegible]	0	5
T-ELN	101	Electronic Instruments and Measurements	[illegible]	[illegible]	[illegible]
T-ELN	105	Control Devices	[illegible]	[illegible]	[illegible]
			[illegible]	8-12	[illegible]
FOURTH QUARTER					
T-ENG	204	Oral Communication	3	0	3
T-MAT	201	Technical Mathematics	5	0	5
T-PHY	104	Physics: Light and Sound	3	2	4
T-ELN	205	Applications of Vacuum Tubes and Transistors	5	4-6	7
			16	6-8	19

FIFTH QUARTER

		Social Science Elective	3	0	3
T-ELN	210	Semiconductor Circuit Analysis	5	2-3	6
T-ELN	214	Wave Shaping and Pulse Circuits	2	2-3	3
		Elective			3
			10	4-6	15

SIXTH QUARTER

		Social Science Elective	3	0	3
T-ELN	215	Wave Shaping and Pulse Circuits	2	2-3	3
T-ELN	220	Electronic Systems	5	4-6	7
		Elective			3
			10	6-9	

"Manipulative laboratory" involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

TECHNICAL PROGRAMS

COURSE DESCRIPTIONS

MECHANICAL

Course Title	Hours Per Week Class	Lab	Quarter Hours Credit
T-MEC 101 Machine Processes	0	6*	2

An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of measuring instruments, characteristics of metals and cutting tools. The student will become familiar with the lathe family of machine tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming. Prerequisite: None.

T-MEC 102 Machine Processes	0	6*	2

Advanced operations on lathe, drilling, boring and reaming machines. Milling machine theory and practice. Thorough study of the types of milling machines, cutters, jig and fixture devices, and the accessories used in a modern industrial plant. Safety in the operational shop is stressed. Prerequisite: T-MEC 101.

T-MEC 205 Strength of Materials	3	2	4

Study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying and dynamic. Analyses of these stresses are made as applied to thin-walled cylinders and spheres, riveted and welded joints, beams, columns and machine components. Prerequisites: T-PHY 106, T-MAT 103.

T-MEC 210 Physical Metallurgy	3	3*	4

Introductory course in metallurgy, a basic study of the properties of metals and alloys. Analysis of the structure of metals and alloys, atomic structure, nuclear structure, and nuclear reactions. Solid (crystalline) structures, methods of designating crystal planes; liquid and vapor phases; phase diagrams; and alloy systems. Prerequisite: T-PHY 101.

T-MEC 211 Physical Metallurgy	3	3*	4

Properties of metals and alloys, the reactions of metals, diffusion, carburizing, metal bonding and homogenization; recrystallization and grain growth, age hardening, nitriding, internal oxidation; heat treatment of steel; laboratory experiments and demonstrations. Prerequisite: T-MEC 210.

		Hours Per Week		Quarter Hours
		Class	Lab	Credit
T-MEC 235	Hydraulics and Pneumatics	3	3*	4

The basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits. Basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators and reservoirs. Prerequisite: T-PHY 102.

ELECTRICITY

T-ELC 101	Fundamentals of Electricity	4	4-6	6

Elementary principles of electricity including: basic electric units, Ohms law, Kirchhoffs laws, network theorems, magnetics, basic electrical measuring instruments, inductance, capacitance, sine wave analysis, and non-resonant resistive, inductive and capacitive networks. Prerequisite: None.

T-ELC 102	Fundamentals of Electricity	4	4-6	6

Series and parallel resonant-circuit analysis, resonant and non-resonant transformer analysis, basic diode power supply analysis, introduction to non-linear resistive control devices, and introduction to electro-mechanical devices. Prerequisite: T-ELC 101.

ELECTRONICS

T-ELN 101	Electronic Instruments and Measurements	1	4-6	3

A study of basic electronic instruments, their theory of operation, function, tolerances, and calibration. Both service and laboratory instruments will be studied. Laboratory experience will provide application of each type instrument studied. Prerequisite: T-ELC 102.

T-ELN 105	Control Devices	5	4-6	7

A study in depth of the electrical characteristics of vacuum tubes and transistors. Basic parameters and applications of each type device to the three configurations of a three terminal two port system will be included. Prerequisite: T-ELC 102.

		Hours Per Week		Quarter Hours
		Class	Lab	Credit
T-ELN 205	Applications of Vacuum Tubes and Transistors	5	4-6	7

Practical applications of vacuum tubes and transistors to basic audio amplifiers, radio frequency amplifiers, detectors, modulators and oscillators. Prerequisite: T-ELN 105.

T-ELN 210	Semiconductor Circuit Analysis	5	2-3	6

A study in some depth of the analysis and design of transistor circuits. Network theorems and equivalent circuits are used extensively in evaluating total circuit performance. Device peculiarities and limitations pertinent to reliable operations are considered. H. Y. Z. and T. parameters are employed as well as signal-flow graphs. Prerequisite: T-ELN 105.

T-ELN 214	Wave Shaping and Pulse Circuits	2	2-3	3

Broadband amplifiers, magnetic amplifiers, multivibrators, wave shaping techniques, chopper amplifiers, clipper and clamper circuits. Prerequisites: T-ELN 105, T-MAT 103.

T-ELN 215	Wave Shaping and Pulse Circuits	2	2-3	3

Pulse techniques, diode switches, gates, step-counters, restorers and other specific circuits which function as switches. Prerequisite: T-ELN 214.

T-ELN 220	Electronic Systems	5	4-6	7

A block diagram course investigating numerous electronic systems. Modules or blocks of various circuits already studied are arranged in various manners to produce complex electronic systems. Systems will be explained and reduced to functions and then to block diagrams. AM, FM, and Single Sideband transmitters and receivers, multiplexing, TV transmitters and receivers, pulse-modulated systems, computers, telepmetry, navigational systems, sonar and radar will be considered. Corequisite: T-ELN 215.

DRAFTING AND DESIGN

	Hours Per Week Class	Lab	Quarter Hours Credit
T-DFT 101 Technical Drafting	0	6*	2

The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced. Prerequisite: None.

T-DFT 102 Technical Drafting	0	6*	2

Application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions will be studied. Most important is the introduction of the graphical analysis of space problems. Problems of practical design elements involving points, lines, planes, and a combination of these elements shall be studied. Dimensioning practices for "details" and "working drawing," approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects. Prerequisite: T-DFT 101.

T-DFT 103 Technical Drafting	0	6*	2

Intersection and developments and their practical solutions. Where applicable, model solutions accompany the problems. The various techniques employed to produce and render isometric and oblique drawings, isometric, dimetric and trimetric projections, will be included Prerequisite: T-DFT 102.

T-DFT 201 Technical Drafting	2	6*	4

Applications and constructions of charts, graphs, and nomographs in engineering and technical data. Screw threads, springs, keys, rivets, piping, and welding symbols, methods of representing and specifying will be covered. Basic mechanisms of motion transfer, gears and cams, will be studied and drawn with emphasis on methods of specifying, calculating, dimensions, and delineating. Prerequisite: T-DFT 103.

T-DFT 204 Descriptive Geometry	2	4	4

Graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems will be stressed with analytical verification where applicable. Visualization shall be stressed on every problem. Prerequisites: T-DFT 102, T-MAT 102.

	Hours Per Week		Quarter Hours
	Class	Lab	Credit
T-DFT 205 Design Drafting I	2	6*	4

Basic design is introduced in the study of motion transfer mechanisms as they relate to power trains. Principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings and simplified drafting practices constitute areas of study. Types and methods of specifying materials and workmanship are an integral part of the course. Prerequisites: T-DFT 204, T-MAT 102, T-PHY 102.

T-DFT 206 Design Drafting II	2	6*	4

Research to solve a problem in design by consulting various manuals, periodicals, and through laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly and sub-assembly drawings, pictorial drawings, exploded pictorial assembly, patent drawings and specifications are required as a part of the problem. Prerequisites: T-DFT 205.

T-DFT 211 Mechanisms	3	2	4

Mathematics and drafting room solutions of problems involving the principles of machine elements. Study of motions of linkages, velocities and acceleration of points within a link mechanism; layout methods for designing cams, belts, pulleys, gears and gear trains. Prerequisites: T-DFT 201 and 204, T-MAT 103, T-PHY 106.

MATHEMATICS

T-MAT 101 Technical Mathematics	5	0	5

The real number system is developed as an extension of natural numbers. Number systems of various bases are introduced. Fundamental algebraic operations, the rectangular coordinate system, as well as fundamental trigonometric concepts and operations are introduced. The application of these principles to practical problems is stressed. Prerequisite: Satisfactory evidence that admission requirements have been met.

T-MAT 102 Technical Mathematics	5	0	5

A continuation of T-MAT 101. Advanced algebraic and trigonometric topics including quadratics, logarithms, determinants, progressions, the binominal expansion, complex numbers, solution of oblique triangles and graphs of the trigonometric functions are studied in depth. Prerequisite: T-MAT 101.

		Quarter Hours Per Week		Quarter Hours
		Class	Lab	Credit
T-MAT 103	Technical Mathematics	5	0	5

The fundamental concepts of analytical geometry, differential and intergral calculus are introduced. Topics included are graphic techniques, geometric and algebraic interpretation of the derivative, differentials, rate of change, the integral and basic integration techniques. Applications of these concepts to practical situations are stressed. Prerequisite: T-MAT 102.

T-MAT 201	Technical Mathematics	5	0	5

A continuation of T-MAT 103. More advanved concepts of differentiation and integration are considered. Included are graphs and derivatives of the trigonometric functions, exponential and logarithmic differentiation and integration, advanced integration techniques, polar equations, parametric equations, and Fourier series. Prerequisite: T-MAT 103.

PHYSICS

T-PHY 101	Physics: Properties of Matter ..	3	2	4

A fundamental course covering several basic principles of physics. The divisions included are solids and their characteristics, liquids at rest and in motion, gas laws and applications. Laboratory experiments and specialized problems dealing with these topics are part of this course. Prerequisite: None.

T-PHY 102	Physics: Work, Energy, Power ..	3	2	4

The major areas covered in this course are work, energy, and power. Instruction includes such topics as statics, forces, center of gravity, and dynamics. Units of measurement and their applications are a vital part of this course. A practical approach is used in teaching students the use of essential mathmatical formulas. Prerequisites: T-PHY 101, T-MAT 101.

T-PHY 103	Physics: Electricity	3	2	4

Basic theories of electricity, types of electricity, methods of production, and transmission and transforming of electricity. Electron theory, electricity by chemical action, electricity by friction, electricity by magnetism, induction voltage, amperage, resitance, horsepower, wattage, and transformers are major parts of the course. Prerequisites: T-PHY 101, T-MAT 101.

	Hours Per Week Class	Lab	Quarter Hours Credit
T-PHY Physics: Light and Sound	3	2	4

A survey of the concepts involving wave motion leads to a study of sound, its generation, transmission and detection. The principles of wave motion also serve as an introduction to a study of light, illumination and the principles involved in optical instruments. Application is stressed throughout. Prerequisites: T-MAT 101, T-PHY 101.

T-PHY 106 Applied Mechanics	5	0	5

Concepts and principles of statics and dynamics. Parallel concurrent and noncurrent force systems in coplanar and noncoplanar situations. Concepts of centroids and center of gravity, moments of inertia, fundamentals of kinetics, and kinematics of velocity and motion. Prerequisites: T-MAT 103, T-PHY 102.

ENGLISH

T-ENG 101 Grammar	3	0	3

Designed to aid the student in the improvement of self-expression in grammar. The approach is functional with emphasis on grammar, diction, sentence structure, punctuation, and spelling. Intended to stimulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life. Prerequisite: None.

T-ENG 102 Composition	3	0	3

Designed to aid the student in the improvement of self-expression in business and technical composition. Emphasis is on the sentence, paragraph and whole composition. Prerequisite: T-ENG 101.

T-ENG 103 Report Writing	3	0	3

The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum. Prerequisite: T-ENG 102.

T-ENG 204 Oral Communication	3	0	3

A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective oral presentation. Particular attention given to conducting meetings, conference, and interviews. Prerequisite: T-ENG 101.

VOCATIONAL DIVISION*

POWER MECHANICS

AUTOMOTIVE

INDUSTRIAL OCCUPATIONS

WELDING

RADIO AND TELEVISION SERVICING

BUILDING CONSTRUCTION TRADES

CARPENTRY

MASONRY

ELECTRICAL INSTALLATION AND MAINTENANCE

PLUMBING AND HEATING

AIR CONDITIONING AND REFRIGERATION

***—Course Descriptions available upon request from College office.**

ADMISSION REQUIREMENTS

The following are minimum admission requirements to the regular one-year trade preparatory curriculums and vocational programs:

MINIMUM ADMISSION REQUIREMENTS

A candidate for admission to the regular trade-vocational training programs must meet the following qualifications:

1. Must be at least 18 years of age and have the ability to enter into or make advancement in the area in which enrolled.
2. Must have satisfactorily completed a minimum of eight (8) units of accredited secondary school work. Those who have not successfully completed eight (8) units of such work will be required to take other standard and/or local institution tests.
3. Must demonstrate aptitude for trade-vocational training as determined by standard and/or local institution tests to insure ability to meet job requirements in the desired trade.
4. Must have one (1) unit of secondary school algebra or an equivalent in modern mathematics. Those who have deficiencies will be required to remove the deficiency before completing their training. Provisional admittance may be granted at the discretion of the administration.
5. Must have a personal interview with designated school representative.
6. Must be in acceptable condition of physical and mental health to meet qualifications for a given occupation. A physical examination is required of all full-time students.

POWER MECHANICS

AUTOMOTIVE

PURPOSE OF CURRICULUM

This Curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair or adjust automotive vehicles. Manual skills are developed in practical shop work. Thorough understanding of the operating principles involved in the modern automobile comes in class assignments, discussion, and shop practice.

Complexity in automotive vehicles increases each year because of scientific discovery and new engineering. These changes are reflected not only in passenger vehicles, but also in trucks, buses and a variety of gasoline-powered equipment. This curriculum provides a basis for the student to compare and adapt to new techniques for servicing and repair as vehicles are changed year by year.

JOB DESCRIPTION

Automobile mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the causes of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition. They use shop manuals and other technical publications.

Automotive mechanics in smaller shops usually are general mechanics qualified to perform a variety of repair jobs. A large number of automobile mechanics specialize in particular types of repair work. For example, some may specialize in repairing only power steering and power brakes, or automatic transmissions. Usually such specialists have an all-round knowledge of automotive repair and may occasionally be called upon to do other types of work.

POWER MECHANICS — AUTOMOTIVE

SUGGESTED CURRICULUM

Course Title		Hours Per Week		Quarter Hours
FIRST QUARTER		**Class**	**Lab**	**Credit**
PME 1101	Internal Combustion Engines	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
ENG 1101	Reading Improvement	2	0	2
PHY 1101	Applied Science	3	2	4
		13	14	18
SECOND QUARTER				
PME 1102	Engine Electrical and Fuel Systems	5	12	9
ENG 1102	Communication Skills	3	0	3
DFT 1101	Schematics and Diagrams: Power Mechanics	0	3	1
PHY 1102	Applied Science	3	2	4
		11	17	17
THIRD QUARTER				
AUT 1123	Automotive Chassis and Suspensions Systems	3	9	6
AUT 1121	Braking Systems	3	3	4
PSY 1101	Human Relations	3	0	3
AHR 1101	Automotive Air Conditioning	2	3	3
WLD 1101	Basic Gas Welding	0	3	1
		11	18	17
FOURTH QUARTER				
AUT 1124	Automotive Power Train Systems	3	9	6
AUT 1125	Automotive Servicing	3	9	6
BUS 1103	Small Business Operations	3	0	3
		9	18	15

INDUSTRIAL OCCUPATIONS

WELDING

PURPOSE OF CURRICULUM

This curriculum was developed to fill the tremendous need for welders in North Carolina. The recently completed Manpower Survey shows quite clearly that many welders will be needed annually to fill present and projected vacancies in the State.

The content of this curriculum is designed to give students sound understanding of the principles, methods, techniques and skills essential for successful employment in the welding field and metals industry.

The field of welding offers a person prestige, security and a future of continuous employment with steady advancement. It offers employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, railroads, construction, pipe fitting, production shop, job shop and many others.

JOB DESCRIPTION

Welders join metals by applying intense heat, and sometimes pressure, to melt the edges to form a permanent bond. Closely related to welding is "oxygen cutting." Of the more than 35 different ways of welding metals, arc, gas, and resistance welding are the three most important.

The principal duty of the welder using manual techniques is to control the melting by directing the heat from either an electric arc or gas welding torch, and to add filler metal where necessary to complete the joint. He should possess a great deal of manipulative skill with a knowledge of jigs, welding symbols, mathematics, basic metallurgy, and blueprint reading.

INDUSTRIAL OCCUPATIONS — WELDING

SUGGESTED CURRICULUM

Course Title		Hours Per Week		Quarter Hours
FIRST QUARTER		**Class**	**Lab**	**Credit**
WLD 1120	Oxyacetylene Welding and Cutting	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
DFT 1104	Blueprint Reading: Mechanical	0	3	1
PHY 1101	Applied Science	3	2	4
ENG 1101	Reading Improvement	2	0	2
		13	17	19
SECOND QUARTER				
WLD 1121	Arc Welding	3	12	7
MAT 1103	Geometry	3	0	3
DFT 1117	Blueprint Reading: Welding	0	3	1
PHY 1102	Applied Science	3	2	4
ENG 1102	Communication Skills	3	0	3
		12	17	18
THIRD QUARTER				
WLD 1124	Pipe Welding	3	12	7
WLD 1123	Inert Gas Welding	1	3	2
WLD 1112	Mechanical Testing and Inspection	1	3	2
DFT 1118	Pattern Development and Sketching	0	3	1
PSY 1101	Human Relations	3	0	3
		8	21	15
FOURTH QUARTER				
WLD 1122	Commercial and Industrial Practices	3	9	6
WLD 1125	Certification Practices	3	6	5
MEC 1112	Machine Shop Processes	0	6	2
BUS 1105	Industrial Organizations	3	0	3
		9	21	16

INDUSTRIAL OCCUPATIONS

RADIO AND TELEVISION SERVICING

PURPOSE OF CURRICULUM

Within recent years improved electronic techniques have provided expanded entertainment and educational facilities in the form of monochrome and color television, frequency modulated radio, high fidelity amplifiers and stereophonic sound equipment. These developments require expanded knowledge and skill of the individual who would qualify as a competent and up-to-date serviceman.

This curriculum guide provides a training program which will provide the basic knowledge and skills involved in the installation, maintenance and servicing of radio, television and sound amplifier system. A large portion of time is spent in the laboratory verifying electronic principles and developing servicing techniques.

JOB DESCRIPTION

A radio and television serviceman may be required to install, maintain and service amplitude modulated and frequency modulated home and auto radios, transistorized radios, monochrome and color television sets, intercommunication, public address and paging systems, high fidelity and stereophonic amplifiers, record players and tape recorders.

His work will require meeting the public both in the repair shop and on service calls. A serviceman who establishes his own business will also need to know how to maintain business records and inventory.

RADIO AND TELEVISION SERVICING

SUGGESTED CURRICULUM

Course Title		Hours Per Week		Quarter Hours
FIRST QUARTER		**Class**	**Lab**	**Credit**
MAT 1115	Electrical Mathematics	5	0	5
ENG 1101	Reading Improvement	2	0	2
ELC 1112	Direct and Alternating Current	5	15	10
		12	15	17
SECOND QUARTER				
MAT 1116	Electrical Mathematics	5	0	5
ENG 1102	Communication Skills	3	0	3
ELN 1122	Vacuum Tubes and Circuits	5	9	8
ELN 1123	Amplifier Systems	2	6	4
		15	15	20
THIRD QUARTER				
ELN 1125	Radio Receiver Servicing	2	6	4
ELN 1126	Transistor Theory and Circuits	4	15	9
PSY 1101	Human Relations	3	0	3
		9	21	16
FOURTH QUARTER OR OPTION				
ELN 1127	Television Receiver Circuits and Servicing	10	15	15
BUS 1103	Small Business Operations	3	9	3
		13	15	18
FOURTH QUARTER OPTION				
ELN 1128	Television Receiver Circuits and Servicing	5	12	9
	Elective (1)	3	6	6
BUS 1103	Small Business Operations	3	0	3
		11	18	18

BUILDING CONSTRUCTION TRADES

CARPENTRY

PURPOSE OF CURRICULUM

Carpentry is one of the basic trades in the construction field. Carpenters construct, erect, install, and repair structures of wood, plywood, and wallboard, using hand and powertools. The work must conform to local building codes for both residential and commercial structures.

This curriculum in carpentry is designed to train the individual to enter the trade with a background in both shop skills and related information. He must have a knowledge of mathematics, blueprint reading, methods of construction and a thorough knowledge of building materials.

The modern carpenter will work on new construction, maintenance, and repair of many types of structures, both residential and commercial. He should have an understanding of building materials, concrete form construction, rough framing, roof and stair construction, the application of interior and exterior trim, and the installation of cabinets and fixtures.

Most carpenters are employed by contractors in the building construction fields. When specializing in a particular phase of carpentry, the job is designated according to the specialty as layout carpenter, framing carpenter, concrete form carpenter, scaffolding carpenter, accoustical and insulating carpenter, and finish carpenter.

JOB DESCRIPTION

The carpenter constructs, erects, installs and repairs structures and fixtures of wood, plywood, wall board and other materials, using carpenters handtools and powertools to conform to local building codes. He is required to use blueprints, sketches or building plans for information pertaining to type of material, dimensions, layout and design of structure, and method of construction.

CARPENTRY

SUGGESTED CURRICULUM

Course Title		Hours Per Week		Quarter Hours
FIRST QUARTER		**Class**	**Lab.**	**Credit**
ENG 1101	Reading Improvement	2	0	2
MAT 1101	Fundamentals of Mathematics	5	0	5
DFT 1110	Blueprint Reading Building Trades	0	3	1
CAR 1101	Carpentry	3	15	8
		10	**18**	**16**
SECOND QUARTER				
ENG 1102	Communication Skills	3	0	3
MAT 1112	Building Trades Mathematics	3	0	3
DFT 1111	Blueprint Reading & Sketching	0	3	1
CAR 1102	Carpentry: Millwork and Cabinetmaking	3	15	8
		9	**18**	**15**
THIRD QUARTER				
PSY 1101	Human Relations	3	0	3
CAR 1113	Carpentry: Estimating	3	3	4
CAR 1103	Carpentry: Framing	3	15	8
		9	**18**	**15**
FOURTH QUARTER				
CAR 1114	Building Codes	3	0	3
BUS 1103	Small Business Operations	3	0	3
CAR 1104	Carpentry: Finishing	3	18	9
		9	**18**	**15**

MASONRY

SUGGESTED CURRICULUM

Course Title		Hours Per Week		Quarter Hours
FIRST QUARTER		**Class**	**Lab.**	**Credit**
MAS 1101	Bricklaying	5	15	10
MAT 1101	Fundamentals of Mathematics	5	0	5
DFT 1110	Blueprint Reading: Building Trades	0	3	1
		10	**18**	**16**
SECOND QUARTER				
MAS 1102	Bricklaying	5	15	10
MAT 1112	Building Trades Mathematics	3	0	3
DFT 1111	Blueprint Reading & Sketching	0	3	1
		8	**18**	**14**
THIRD QUARTER				
MAS 1103	General Masonry	5	15	10
MAS 1113	Masonry Estimating	3	3	4
DFT 1112	Blueprint Reading & Sketching	0	3	1
		8	**21**	**15**

BUILDING CONSTRUCTION TRADES

MASONRY

PURPOSE OF CURRICULUM

Masons are the craftsmen in the building trades that work with artificial stone, brick, concrete masonry units, stone and the like. During the past decade there has been a steady increase in the demand for these craftsmen. As building construction continues to increase the demand for bricklayers, cement masons, and stonemasons will also increase.

This curriculum in Masonry is designed to train the individual to enter the trade with the knowledge and basic skills that will enable him to perform effectively. He must have a knowledge of basic mathematics, blueprint reading and masonry technology. He must know the methods used in laying out a masonry job with specific reference to rigid insulation, refractories, and masonry units specified for residential, commercial and industrial construction.

Most employment opportunities for masons may be found with contractors in new building construction. However, a substantial proportion of masons are self-employed or work with contractors doing repair, alteration, or modernization work.

JOB DESCRIPTION

Most masons are employed by contractors in the building construction fields to lay brick, and blocks made of tile, concrete, glass, gypsum or terra cotta. Also, he constructs or repairs walls, partitions, arches, sewers, furnaces and other masonry structures.

After gaining experience in the various types of the masonry trade along with leadership training, it is possible for the tradesman to become a foreman, inspector and eventually a contractor.

BUILDING CONSTRUCTION TRADES

ELECTRICAL INSTALLATION AND MAINTENANCE

PURPOSE OF CURRICULUM

The rapid expansion of the national economy and the increasing development of new electrical products is providing a growing need for qualified people to install and maintain electrical equipment. By mid-1960 more than 350,000 were employed as either construction electricians or maintenance electricians. Between 5,000 and 10,000 additional tradesmen are required each year to replace those leaving the industry. It is expected that the total requirements for electrical tradesmen will reach 500,000 by 1966 and 700,000 by 1970. The majority of the electrical tradesmen today are trained through apprenticeship or on-the-job training programs.

This curriculum guide will provide a training program in the basic knowledge, fundamentals, and practices involved in the electrical trades. A large portion of the program is devoted to laboratory and shop instruction which is designed to give the student practical knowledge and application experience in the fundamentals taught in class.

JOB DESCRIPTION and REQUIREMENTS

The graduate of the electrical trades program will be qualified to enter an electrical trade as an on-the-job trainee or apprentice, where he will assist in the planning, layout, installation, check out, and maintenance of systems in residential, commercial, or industrial plants. He will have an understanding of the fundamentals of the National Electrical Code regulations as related to wiring installations, electrical circuits, and the measurements of voltage, current, power, and power factor of single and polyphase alternating circuits. He will have a basic knowledge of motor and motor control systems; industrial electronic control systems; business procedures, organization, and practices; communicative skills; and the necessary background to be able to advance through experience and additional training through upgrading courses offered in the center.

ELECTRICAL INSTALLATION AND MAINTENANCE

SUGGESTED CURRICULUM

Course Title		Hours Per Week		Quarter Hours
FIRST QUARTER		**Class**	**Lab.**	**Credit**
ELC 1112	Direct and Alternating Current	5	12	9
ENG 1101	Reading Improvement	2	0	2
MAT 1115	Electrical Math	5	0	5
PHY 1101	Applied Science	3	2	4
		15	**14**	**20**
SECOND QUARTER				
ELC 1113	Alternating Current and Direct Current Machines and Controls	5	12	9
DFT 1110	Blueprint Reading: Building Trades	0	3	1
ENG 1102	Communication Skills	3	0	3
PHY 1102	Applied Science	3	2	4
		11	**17**	**17**
THIRD QUARTER				
ELC 1124	Residential Wiring	5	9	8
ELN 1118	Industrial Electronics	3	6	5
PSY 1101	Human Relations	3	0	3
DFT 1113	Blueprint Reading: Electrical	0	3	1
		11	**18**	**17**
FOURTH QUARTER				
ELC 1125	Commercial and Industrial Wiring	5	12	9
ELN 1119	Industrial Electronics	3	6	5
BUS 1103	Small Business Operations	3	0	3
		11	**18**	**17**

BUILDING CONSTRUCTION TRADES

PLUMBING AND HEATING

PURPOSE OF CURRICULUM

Plumbers are the craftsmen who install pipe systems which carry water, steam, air, or other liquids or gases needed for sanitation, heating, industrial production and various other uses. During the past decade there has been a steady increase in the demand for these craftsmen. As building construction continues to increase this demand for plumbers will also increase.

This curriculum in plumbing and heating is designed to train the individual to enter this occupation with the knowledge and basic skills that will enable him to perform effectively. Courses in plumbing practices and heating are included to provide practical experience as well as the theoretical information that one must know to advance and keep up-to-date with new innovations. Other courses in communication skills, physics, human relations and business operations are provided to assist the individual in occupational growth.

Opportunities for plumbers and pipefitters may be found with plumbing and pipefitting contractors in new building construction. A substantial proportion of plumbers are self-employed or work for plumbing contractors doing repair, alteration, or modernization work. Some plumbers install and maintain pipe systems for government agencies and public utilities, and some work on the construction of ships and aircraft. Pipefitters, in particular, are employed as maintenance personnel in the petroleum, chemical, and food-processing industries.

JOB DESCRIPTION

Most plumbers are employed by contractors in the building construction fields to install pipe systems which carry water, steam, air or other liquids or gases for sanitation, heating, industrial production and various other uses. They also alter and repair existing pipe systems and install plumbing fixtures, appliances, and heating and refrigeration units.

Plumbing and pipefitting are sometimes considered to be a single trade, journeymen in this field can specialize in either one. Water, gas, and waste disposal systems are installed by plumbers. Pipefitters install both high and low pressure pipes that carry hot water, steam, and other liquids and gases, especially those in industrial and commercial buildings and defense establishments, such as missile launching and testing sites.

PLUMBING AND HEATING

SUGGESTED CURRICULUM

Course Title		Hours Per Week		Quarter Hours
FIRST QUARTER		**Class**	**Lab.**	**Credit**
ENG 1101	Reading Improvement	2	0	2
PHY 1101	Applied Science	3	2	4
DFT 1110	Blueprint Reading: Building Trades	0	3	1
MAT 1101	Fundamentals of Mathematics	5	0	5
PLU 1110	Plumbing Pipework	3	9	6
		14	14	18
SECOND QUARTER				
ENG 1102	Communication Skills	3	0	3
PHY 1102	Applied Science	3	2	4
DFT 1115	Blueprint Reading: Plumbing Trades	0	3	1
PLU 1111	Domestic Water Systems	2	9	5
PLU 1120	Low Pressure Steam Systems	2	6	4
		10	**20**	**17**
THIRD QUARTER				
PSY 1101	Human Relations	3	0	3
PLU 1121	High Pressure Steam Systems	3	9	6
WLD 1101	Basic Gas Welding	0	3	1
PLU 1112	Installation of Plumbing Fixtures	3	9	6
		9	**21**	**16**
FOURTH QUARTER				
BUS 1103	Small Business Operations	3	0	3
PLU 1126	Hydraulic Systems Plumbing	2	3	3
PLU 1125	Industrial Piping	3	9	6
PLU 1123	Hot Water and Panel Heating	3	6	5
		11	**18**	**17**

BUILDING CONSTRUCTION TRADES

AIR CONDITIONING AND REFRIGERATION

PURPOSE OF CURRICULUM

In recent years the use of air conditioning and refrigeration equipment has increased tremendously. Practically all new building construction for business and commercial use have "all year" comfort systems. Many homes now have air conditioning and the trend is toward greater use of "all year" systems of cooling and heating. The food industry is requiring greater use of refrigeration systems in freezing, storage, and display of products. With this great upswing in the use of air conditioning and refrigeration equipment, a greater demand is made on trained personnel to install, operate, maintain and service this equipment.

This curriculum is designed to give the students practical knowledge that will enable them to become capable service men in the industry. The principle objective has been to outline the required technical and related instruction to enable them to understand the basic principles involved in the construction, operation, and maintenance of equipment. Job opportunities exist with companies that specialize in air conditioning, automatic heating, sheet metal and commercial refrigeration installation and service. The service man is employable in areas of sales, maintenance, installation and in the growing fields of truck and trailer refrigeration.

JOB DESCRIPTION

The air conditioning and refrigeration mechanic installs, inspects, maintains, services and repairs domestic and commercial equipment. Connects motors, compressors, temperature controls, humidity controls, and circulating fans to control panels. Tests systems, observes pressure and vacuum gauges and adjusts controls to insure proper operation.

AIR CONDITIONING AND REFRIGERATION

SUGGESTED CURRICULUM

Course Title		Hours Per Week		Quarters Hours
FIRST QUARTER		**Class**	**Lab.**	**Credit**
AHR 1121	Principles of Refrigeration	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
ENG 1101	Reading Improvement	2	0	2
PHY 1101	Applied Science	3	2	4
DFT 1104	Blueprint Reading: Mechanical	0	3	1
		13	**17**	**19**
SECOND QUARTER				
AHR 1122	Domestic and Commercial Refrigeration	3	9	6
MAT 1102	Algebra	5	0	5
ENG 1102	Communication Skills	3	0	3
ELC 1102	Applied Electricity	2	3	3
DFT 1116	Blueprint Reading: Air Conditioning	1	3	2
		14	**15**	**19**
THIRD QUARTER				
AHR 1123	Principles of Air Conditioning	3	12	7
AHR 1128	Automatic Controls	3	6	5
PSY 1101	Human Relations	3	0	3
WLD 1101	Basic Gas Welding	0	3	1
		9	**21**	**16**
FOURTH QUARTER				
AHR 1124	Air Conditioning and Refrigeration Servicing	3	6	5
AHR 1126	All Year Comfort Systems	3	6	5
MEC 1120	Duct Construction and Maintenance	3	6	5
BUS 1103	Small Business Operations	3	0	3
		12	**18**	**18**

DIVISION OF ADULT EDUCATION AND EXTENSION

The primary objectives of the Adult Education and Extension Division of Surry Community College are to meet general educational, vocational, and self-fulfillment needs of persons over eighteen years of age in the college service area. Courses and services may range from short seminars and exhibits to somewhat lengthy appenticeship training courses of several months duration.

Special emphasis programs include literacy training in Adult Basic Education to eighth grade level, high school completion equivalency in the Fundamentals Learning Laboratory utilizing programmed instruction materials, Supervisory Development Training courses for up-grading of industrial management personnel, and short courses in a wide range of vocational, trade, and interest areas.

Courses in adult education and extension may be started at any date, at any place, and at any time of day most conveinent for the participant enrolled. Persons interested in organizing adult educational courses need only to make request for assistance to the Director of Adult Education, Surry Community College—P. O. Box 304, Dobson, North Carolina. Telephone No. 386-2422 or 386-4955.

Partial listing of suggested short courses:

Personal Income Tax

Small Gasoline Engines Repair

Home and Farm Electricity

Great Decisions Seminars (Current Events)

Farm Tractor Repair

Clerical Office Procedures

Firemanship Training

Art Appreciation

Pesticides and Chemical Weed Control

Rescue Training

Personal Typing

Home Beautification

Auto Tune-up

Electric Welding

Child Care and Nutrition

Elementary Bookkeeping

FACULTY

I. John Krepick, President
Pennsylvania State College, B. S.; New York University, M. A.; Additional graduate study, University of Pennsylvania.

Robert Elwood Chilton, Academic Dean
Appalachian State, B. S.; University of North Carolina, M. Ed., Ed. D. Candidate. Additional study, Yale University.

Henry Clyde Johnson, Mathematics and Business
Elon College, A. B.; University of North Carolina, M. A. T. Additional graduate study, N. C. State University.

Paul Edward Keicher, Chairman Technical-Vocational Division
Syracuse University, B. Ch. E., Additional graduate study, Utica College.

Ray Campbell Reed, English
Bridgewater College, B. A.; Appalachian State, M. A.; Additional graduate study, University of North Carolina.

Richard Carl Seltzer, Biology
Alfred State Tech., A. A. S.; University of Georgia, B. S.; Ohio University, M. S.

George Evans Stockton, Dean of Student Personnel
Trenton State College, B. S.; Temple University, M. Ed.; Additional graduate study, University of Texas.

Carlos Paul Surratt, English and Counseling
University of North Carolina, A. B.; Appalachian State, M. A. Additional graduate study, North Carolina State University.

James Huie Templeton, Director Adult Education
Appalachian State, B. S.; M. A.; Additional graduate study, University of North Carolina.

Raymond Wenger, Chemistry
Pennsylvania State University, B. S.; M. S.; Purdue University, Ph. D.

Peggy Dalton Wilson, Business Education
Radford College, B. S.; V. P. I., M. Ed.

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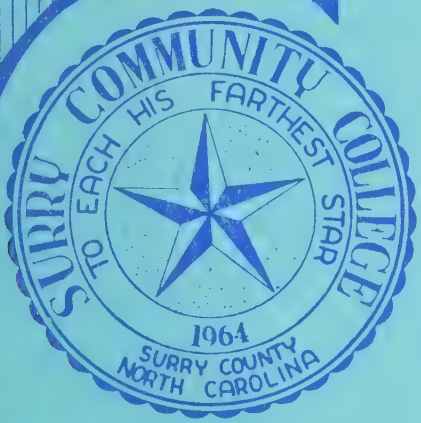

Surry Community College

1968

	S	M	T	W	T	F	S
JAN		1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	31			
FEB					1	2	3
	4	5	6	7	8	9	10
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	29		
MAR						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31						
APR		1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30				
MAY				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30	31	
JUN							1
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30						

1968

	S	M	T	W	T	F	S
JUL			1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	31			
AUG					1	2	3
	4	5	6	7	8	9	10
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	29	30	31
SEP	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30					
OCT			1	2	3	4	5
	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31		
NOV						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
DEC	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31				

1969

	S	M	T	W	T	F	S
JAN				1	2	3	4
	5	6	7	8	9	10	11
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SURRY COMMUNITY COLLEGE

●

Catalog

1968 - 1970

Established by authority of the 1963
General Assembly under Chapter 115A.

●

BOX 304, DOBSON, NORTH CAROLINA 27017
TELEPHONE 386-4955 (Area Code 919)

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Surry Community College Bulletin, Volume II, Number I,
1968, Announcements for 1968-1970.

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COLLEGE CALENDAR 1968 - 69

SUMMER QUARTER — 1968

June 10	Registration
July 4-5	Holiday
August 20	Quarter ends

FALL QUARTER — 1968

September 5-6	Registration (Day & Evening)
September 9	Orientation
September 10	Classes begin
September 16	Last day to enroll or add classes
October 7	Last day to drop without academic penalty
October 14	Mid-term reports due
November 21-27	Fall quarter exams
November 28-29	Thanksgiving

WINTER QUARTER — 1968

December 2	Registration
December 3	Classes begin
December 9	Last day to enroll or add classes
Dec. 23 - Jan. 1	Holiday
January 2	Classes resume
January 2	Last day to drop without academic penalty
January 10	Mid-term reports due
Feb. 26 - March 4	Winter quarter exams

SPRING QUARTER — 1969

March 5	Registration
March 6	Classes begin
March 13	Last day to enroll or add classes
April 3	Last day to drop without academic penalty
April 4-8	Spring holiday
April 18	Mid-term reports due
April 9	Classes resume
May 22-28	Spring quarter exams
May 30	Graduation

SUMMER QUARTER — 1969

June 5-6	Registration
July 4	Holiday
June 9	Classes begin
August 22	Classes end

COLLEGE CALENDAR 1969 - 70

FALL QUARTER — 1969

September 4-5	Registration (Day & Evening)
September 8	Orientation
September 9	Classes begin
September 15	Last day to enroll or add classes
October 6	Last day to drop without academic penalty
October 17	Mid-term reports due
November 20-26	Fall quarter exams
November 27-28	Thanksgiving holidays

WINTER QUARTER — 1969

December 1	Registration
December 2	Classes begin
December 8	Last day to enroll or add classes
Dec. 22 - Jan. 2	Holiday
January 5	Classes resume
January 5	Last day to drop without academic penalty
January 16	Mid-term reports due
March 2-6	Winter quarter exams

SPRING QUARTER — 1970

March 9	Registration
March 10	Classes begin
March 16	Last day to enroll or add a class
March 27-31	Holiday
April 1	Classes resume
April 6	Last day to drop without academic penalty
April 17	Mid-term reports due
May 25-29	Spring quarter exams
June 1	Graduation

SUMMER QUARTER — 1970

June 8	Registration

SURRY COMMUNITY COLLEGE
BOARD OF TRUSTEES

ROBERT E. MERRITT Chairman	Route 4 Mount Airy, North Carolina 27030
R. G. CHATHAM Vice Chairman	307 East Main Street Elkin, North Carolina 28621
Foy Clark	Box 1102 Mount Airy, North Carolina 27030
Frank Comer	Dobson, North Carolina 27017
Charles L. Folger	Dobson, North Carolina 27017
Thomas L. Folger	232 Grace Street Mount Airy, North Carolina 27030
John P. Frank	631 Willow Street Mount Airy, North Carolina 27030
Robert M. Lowe	Lowgap, North Carolina 27024
Mrs. Roxie B. Roth	437 West Main Street Elkin, North Carolina 28621
Oscar Smith	Pilot Mountain, North Carolina 27041
Howard O. Woltz, Jr.	c/o Dixie Exposaic, Inc. Box 1122 Mount Airy, North Carolina 27030
Robert Yarborough	Box 307 Jonesville, North Carolina 28642

COLLEGE PERSONNEL
ADMINISTRATION

I. JOHN KREPICK ---------- President
George Evans Stockton ---------- Dean of Student Personnel
James H. Templeton ---------- Director of Adult Extension
Carlos Surratt ---------- Director of Evening Division
Henry Clyde Johnson ---------- Business Manager
Paul Edward Keicher---- Chairman, Technical-Vocational Division
Raymond C. Freeman ---------- Librarian
James M. Reeves ---------- Counselor and Admissions
Mary Ruth Thompson ---------- Counselor and Activities
Weldon Reece ---------- Coordinator Learning Laboratory

OFFICE AND GENERAL STAFF

Janice Barker ---------- Library Clerk

Grace Gale ---------- Snack Bar Manager

Leona Cook ---------- Assistant Snack Bar Manager

Bonnie Hamlin ---------- Secretary

Betty Hemmings ---------- Bookkeeper

Graham Lawrence ---------- Building Superintendent

Mary Jane Overton ---------- Secretary

Paula Pratt ---------- Library Clerk

Alma Shinault ---------- Receptionist

FACULTY

ALLRED, SAMMY LEE ---------- Business Administration
B. S. — Appalachian State University; M. A. — Appalachian State University.

ATKINS, BROADUS D. ---------- Automotive Mechanics
A. A. S. — Central Utah Vocational School.

CALLOWAY, MARY ANN ---------- English and History
A. B. — Salem College; M. A. — Wake Forest College.

CHILTON, WARREN ---------- Mathematics
A. B. — High Point College; M. ED. — University of N. C.

COX, ABBE ROSE* ---------- Art
B. S. — Columbia University; M. A. — Columbia University.

FREED, RAYMOND ERIC ---------- Drafting and Design
A. A. S. — Forsyth Technical Institute; Additional Work — North Carolina State University.

FREEMAN, RAYMOND CARL ---------- Librarian
B. S. — University of North Carolina; M. A. — Appalachian State University.

HINSHAW, LETTIE* ---------- Physical Education
B. S. — Appalachian State University; M. A. — Appalachian State University.

HINSHAW, PAUL ---------- Physical Education
B. S. — Appalachian State University; M. A. — Appalachian State University.

HOLCOMB, CONRAD C., JR. ---------- Social Science
A. B. — University of North Carolina; M. A. — George Washington University.

HUTCHENS, JAMES ALBERT ---------- History and Economics
A. B. — University of North Carolina; M. A. — University of North Carolina.

JOHNSON, HENRY CLYDE ---------- Business Manager
A. B. — Elon College; M. A. T. — University of North Carolina

KEICHER, PAUL EDWARD ---------- Drafting; Chairman, Technical Vocational Division.
B. CH. E. — Syracuse University; Additional Work — Utica College.

KREPICK, I. JOHN ---------- President
B. S. — Bloomsburg State College; M. A. — New York University; Additional graduate work — University of Pennsylvania.

LEAR, CHARLES MERRITT ---------- Electronics
B. S. — University of North Carolina; M. S. — University of North Carolina.

McCANN, JAMES GUY ---------- Mathematics
B. S. — Appalachian State University; M. A. — Appalachian State University; Additional graduate work — University of North Carolina.

REED, RAY CAMBELL ---------- English
B. A. — Bridgewater College; M. A. — Appalachian State University; Additional graduate work — University of North Carolina.

REESE, WELDON ---------- Learning Laboratory
B. S. — Guilford College.

REEVES, JAMES MICHAEL ---------- Counseling
B. S. — Appalachian State University; M. A. — Appalachian State University.

RICHARDSON, CARMEN FRYE* ---------- Music
A. A. — Davenport Junior College; B. S. — University of North Carolina.

ROGERS, ELDON SYKES* ---------- Spanish
B. S. — Appalachian State University; Additional graduate work — University of Mexico.

SELTZER, RICHARD CARL ---------- Biology
A. A. S. — Agricultural and Technical Institute at Alfred; B. S. — University of Georgia; M. S. — Ohio University.

SPARGER, GOLDIE S. ---------- Secretarial Science
B. S. — Steed College; M. A. — Appalachian State University.

STOCKTON, GEORGE EVANS ____ Director of Student Personnel
B. S. — Trenton State College; M. ED. — Temple University; Additional graduate work — University of Texas.

SURRATT, CARLOS PAUL ____ Director, Evening Division
A. B. — University of North Carolina; M. A. — Appalachian State University; Additional graduate work — North Carolina State University.

TAYLOR, PEGGY HILL ____ Secretarial Science
A. A. — Mars Hill College; B. S. — Appalachian State University.

TEMPLETON, JAMES H. ____ Director, Adult Education
B. S. — Appalachian State University; M. A. — Appalachian State University; Additional graduate work — University of North Carolina.

THOMPSON, MARY RUTH ____ Sociology; Counseling
B. S. — University of North Carolina; M. S. — University of North Carolina; Additional graduate work — University of North Carolina.

VAN HORN, JOHN MAX ____ English
B. S. — Appalachian State University; M. A. — Appalachian State University.

WALLACE, JAMES HAMPTON ____ Business Administration
B. S. — North Carolina State University; M. B. A. — Harvard University.

WENGER, RAYMOND ____ Chemistry
B. S. — Pennsylvania State University; M. S. — Pennsylvania State University; PH. D. — Purdue University.

* Part Time.

EVENING DIVISION FACULTY

BOWMAN, JERROLD B. ____ Drafting

EDINGER, JOHN H. ____ Data Processing

EPPERSON, B. C. ____ Welding

FANNON, GAIL ____ Secretarial

HOLDER, ROBERT B. ____ History

HOLYFIELD, EVELYN ____ English

MATTHEWS, BESSIER ____ Secretarial

MAYE, JOSEPH B. ____ Psychology

TYSON, TRINA H. ____ Mathematics

WHITE, WILLIAM B. ____ Learning Laboratory

COLLEGE AIMS AND OBJECTIVES

Surry Community College will strive to offer to its community a program to improve skills and develop an intellectual understanding of life. The education of the whole man—the development of all men and of all man's capabilities—aesthetic, social, intellectual and manipulative—will be its goal.

Surry Community College, a two-year college sponsored by Surry County and established under the provision of Chapter 115A of the General Statutes assumes its responsibility to:

—prepare students who desire to transfer to other colleges, by providing them with an adequate preparation of two years of college credit courses.

—prepare those students who wish to qualify for technical occupations by providing them with a strong program of studies appropriate to the needs of the individual and the community.

—provide a program of vocational education for those desiring to upgrade themselves in their chosen vocation or who wish to learn new skills or a new trade.

—encourage students to participate in extracurricular activities to the end that service to the college community may be demonstrated and at the same time foster their own sense of development and well-being.

—provide varied-educational programs for the adult members of the service area who wish to improve their personal efficiency, enrich their cultural lives, or develop basic education skills.

HISTORY

Long before the publications of the Carlyle Report citizens of Surry County became interested in establishing a community college in the area. In 1960, the Mount Airy Lions Club appointed a committee of five members to study the possibilities and to communicate with the Division of Higher Education in Raleigh. In 1962, the committee was expanded to include all major civic groups in the county.

Local newspapers and radio stations endorsed the project and expressed wholehearted approval. By May, 1963, interest in a community college had reached a point that a county-wide meeting was held in Dobson to discuss procedural steps. Following the meeting the Surry County Board of Commissioners and the Boards of Education of the Elkin City Schools, the Mount Airy City Schools, and the Surry County Schools endorsed the community college project. Steps were taken to initiate a county-wide study.

The Surry County Board of Commissioners appointed a Community College Steering Committee on August 5, 1963, composed of fourteen members. This committee voted unanimously to complete the county survey and to submit an application to the State Board of Education at its December meeting for a comprehensive community college for Surry County. The application was submitted and approved by the State Board on January 10, 1964. On November 2, 1964, Mr. I. John Krepick was elected President of the Surry Community College.

FACILITIES

Construction of College Facilities began in March, 1966, on a 46 acre site on Highway 601, less than a mile south of Dobson, North Carolina. Classes began using the campus facilities in September 1967. The campus includes three major structures, a science-technical building, shop building, and a learning resources building. These buildings house classrooms, four shop areas, business and science laboratories, learning laboratory, language laboratory, art studio, two lecture auditoriums, a completely furnished library, administrative offices, student study and faculty lounge areas, a snack bar, and a bookstore. On-campus parking is available.

LIBRARY

The library is an integral part of the College educational program and is administered in the belief that its resources play an important part in a student's education. The library collection will center on various curricula offered and will be supplemented by books, and other materials of general interest. Study carrels, music listening alcoves, typewriter service rooms, microfilm reference collection, and tape recordings will provide students and faculty with educational aids.

Library assistants are on duty from 8 a. m. to 9:45 p. m. Library rules are stated in the Student Handbook.

ACCREDITATION

Surry Community College is a comprehensive public community college operating under the direction of the North Carolina Department of Community Colleges and is accredited by the State Department of Education. The college is a recognized candidate for membership in the Southern Association of Colleges and Schools and has declared its intention to work closely with the Association in the pursuit of accreditation and membership at the earliest possible date.

ADMISSIONS POLICY

Surry Community College is an "open-door" college and is not bound by restrictive admissions policies insofar as admission tests are concerned. It is the feeling of the college staff that secondary school records more accurately predict college success than any other criteria. However, since college transfer students will, in most cases, need the SAT or CEEB for transfer, it is strongly recommended that prospective college parallel students take this test while in high school.

The College will administer various tests which assist in the placement of students in the most suitable program. A personal interview with an admissions officer will aid the student to determine his specific educational and vocational objectives. Where scores on test indicate a lack of readiness to commence college-level work, the student will be assigned to a developmental studies program (non-credit) or to a learning laboratory. Most curricula require high school graduation or equivalent.

APPLICATION PROCEDURES

1. Complete an application and enclose a $10 application fee to the Admissions Office. This fee will be applied toward the tuition for the first quarter of college attendance. Students are urged to submit applications well in advance of the quarter which is selected for enrollment.

2. Upon receipt of the application the prospective student will receive detailed instructions regarding admission procedures.

3. Beginning students should request their high school to forward a transcript of their work to the Admissions Office.

4. Students transferring from another college will be accepted at the discretion of the Admission Office. Transfer students should request official transcripts of all work attempted elsewhere. Such transcripts must be sent directly to Surry Community College.

5. Before final acceptance, a student must have a physical examination. The medical form is provided.

A transfer student must also follow the procedure for admission. Each application will be treated upon its individual merit. Credit will be granted for work of at least "C" grade which is applicable to the program selected at this College. Requests for evaluation of credit earned elsewhere must be made in writing and should be addressed to the Registrar.

COUNSELING SERVICE

The prospective student will be given the opportunity to

discuss his program with a professional counselor. Most full-time students will be required to arrange such an interview after transcripts have been received and analyzed.

A student who plans to transfer to a four-year college upon completion of the work at Surry Community College should inform his counselor of such plans at the time of his first interview. If possible, the student should indicate the institution to which he plans to transfer so that a program appropriate to the curriculum requirements of that institution might be developed.

CLASS ATTENDANCE

Absences are serious deterrent to good scholarship. Regular attendance is regarded as an essential part of the educational process. The student is expected to benefit by classroom discussion as well as his daily text assignment.

Although the college has made no provisions for excusing absences from classes, an occasional absence might be absolutely necessary. Such absences in no way lessen the student's responsibility for meeting the requirements of the class. It will be the student's responsibility to contact the instructor for any missed assignment.

PHYSICAL EDUCATION

All full-time college parallel students must complete two years of physical education to qualify for an associate degree at graduation. This program will be arranged to meet the interest and needs of the students, with emphasis on physical fitness and carryover activities.

Techonology and vocational majors may elect physical education.

The College will sponsor intramural athletics and recreational activities for men and women as the need develops.

In so far as possible within budget limits and college policy a moderate program of intercollegiate sports will be scheduled. The College subscribes to the belief that a moderate athletics program will contribute to college life and develop esprit de corps among students, faculty and alumni.

STUDENT CONDUCT

The conduct of college students, both in and out of school, is expected to be that of any respectable adult in a public place.

Students should consider at all times that the reputation of the institution depends in no small part upon their behavior. No long list of regulations and penalties should be necessary if each student abides by the rules of common courtesy and cooperation. The college reserves the right to dismiss any student who in its judgment conducts himself in a manner incompatible with the purposes of the college.

FRESHMAN ORIENTATION

The college will hold a freshman orientation session during the week preceding the opening of school in the fall. The purpose of the orientation program is to introduce the student to his new environment, and to acquaint him with the policies of the College. Every student is assigned a faculty adviser whose advice and counsel is available to him throughout his college career.

All entering students must attend the orientation program scheduled at the beginning of the first quarter. At these sessions the College program, activities, regulations, opportunities, and services will be explained to students. Test for guidance and placement may be scheduled by the counseling staff.

GUIDANCE

Guidance of the student begins with the admissions interview. Immediately after registration, students meet with the faculty in their major course of study for an orientation to the entire curriculum. Each student is assigned to a faculty counselor who helps him select his courses in subsequent quarters. Students are invited to discuss their personal and classroom problems, as well as their educational and vocational plans with any member of the college staff, as well as with the office of Student Personnel. The Dean of Student Personnel helps students in all matters pertaining to transfer.

Students who need specialized, individual counseling service beyond that provided by faculty advisers may be referred to the Counseling Center. Students are invited to use the Center for help in vocational planning. Aid is available for those who have speech or reading difficulties. Staff members also serve in a confidential capacity, upon request by a student with a personal problem.

CO-CURRICULAR ACTIVITIES

The College recognizes that a well-balanced education program provides some time for social, cultural, and recreational activities. The office of the Dean of Student Personnel coordinates this

aspect of college life . . . The Student Government Association is composed of all full-time students.

Members to Student Government Council are elected from various curriculum. The purpose of the Student Government Association shall be to provide means for responsible student participation in the entire program of student affairs.

FINANCIAL AID

A limited number of scholarships are available at present time; however, more student aid is expected in the near future. Students desiring such aid should make this known when filing for admission application. High school guidance counselors should be consulted for additional information. Veteran benefits will be handled through Dean of Student Personnel Office.

SCHOLARSHIPS

North Carolina Foam Industries of Mount Airy provide $850. annually for one year tuition awards. Scholarships are given to full time students with high academic performance and in financial need.

Chatham Foundation, Inc. of Elkin has established a general loan and scholarship fund to be administered by the Surry College Foundation scholarship committee. Regulations pertaining to this $500. gift will be developed so reiepients can be designated soon.

The Mount Airy Kiwanis Club provides a $150. scholarship to a student from North Surry High School and preference is given to a candidate enrolled in a technical or vocational program. A similar award of $150. is awarded to a student graduating from the Mount Airy High School.

The Dobson Women's Club awards a $300. scholarship to a Surry Central High School graduate who registers for full time study at the college.

The Dobson Jaycees will award a tuition scholarship to a Surry Central graduate.

OTHER FINANCIAL AID

The following area industries participate in a Tuition-Refund plan for employees who continue their studies at the college. Eligiblity rules, reimbursement procedures, approved courses and other information concerning this type of financial aid should be referred to these current cooperating firms: Proctor-Silex, Co., Mount Airy; R. J. Reynolds Tobacco Co., Winston-Salem; Sunbeam Corporation, Elkin.

WORK-STUDY PROGRAMS

Part-time jobs are available on campus for students wishing to earn a part of their expenses. Jobs are assigned by the Dean of Students to those students who are most urgently in need of help. In the assignment of part-time jobs, consideration is given to such factors as scholarship, financial need, and willingness to work.

STUDENT INSURANCE AND MEDICAL FACILITIES

A low-cost student insurance plan is available for all students. Students are urged to take advantage of this insurance. All students participating in Intercollegiate athletics, Physical Education, Intramural Sports, Science or Vocational Laboratories are required to have accident insurance coverage.

The college does not provide medical facilities; however, first-aid equipment is readily available in various areas of the campus. In case of accidents or serious illness the parents are notified immediately. Emergency treatment, by private physician or hospitalization, is at the student's expense.

STUDENT HOUSING

Students who desire temporary living accomodations in the vicinity of the College are responsible for making their own arrangements to secure housing. The College will render limited assistance when possible in aiding students to make adequate preparation for accomodations.

The College maintains no facilities for the housing of students.

FOOD SERVICES

The College snack bar will provide light lunches and snacks throughout each day of operation. Schedules of hours will be posted.

JOB PLACEMENT

The Placement Office of the College is located in the Counseling Center under an experienced full-time job counselor. College is a "full-time job." Therefore, the Job Placement Office advises students in the following categories not to hold part-time jobs: full-time students who are in their first quarter, those who are on academic probation, and those who have health problems. Within these limitations, students are invited to register for part-time and graduates for full-time employment, and both for counseling on career plans.

STUDENT ACTIVITY FEE

A student activity fee will be charged each full-time student. The proceeds of this fee will remain in the College and will be budgeted cooperatively by students and faculty in support of non-curricular educational activities. These activities will include such functions as publications, speakers, artists, debate, drama and athletics.

Part-time students may purchase the student activity card. Part-time students who do not wish to purchase a student activity card may be charged admission to certain functions.

BOOKS AND SUPPLIES

It will be the responsibility of each student to secure those textbooks and other supplies which may be required. Since those items may be used on the first day of classes, they should be purchased on the day of registration. The College Bookstore will be open during the hours of registration and at specified times thereafter.

OFFICIAL TRANSCRIPTS

Upon request of the student, an official transcript of his record at Surry Community College will be sent to any college or university, or to the student.

Each student is entitled to one official transcript of his work at no cost, provided all accounts with the College have been settled satisfactorily. A fee of $1.00 is charged for each additional transcript.

TUITION DEPOSIT (Application Fee $10.00)

This deposit is paid at the time of applying for admission and is applied toward the tuition fee at the time of registration. (Refundable only if student is not accepted.)

TUITION, FEES, AND OTHER EXPENSES

Tuition is set by the State Board of Education and is subject to change without notice. All students taking associate degree, certificate, or diploma programs must pay an annual registration fee of $2.00. All charges for tuition and fees are due and payable on the day of registration for classes. Check and money orders should be made payable to Surry Community College.

REGISTRATION

The college operates on a quarter system. One unit of credit is equal to one class hour meeting per week. Each quarter will be between eleven and twelve weeks in length. Students pursuing an organized program of study must register and pay all tuition fees at the beginning of each quarter.

COLLEGE FEE SCHEDULE

Tuition Charges	College Parallel Courses	Technical and Vocational Courses
Application Deposit Fee (Effective September 1, 1968)	$ 10.00	$10.00
Registration fees paid each year, nonrefundable	2.00	2.00
State resident, full time, 15 hrs; per quarter	42.00	32.00
State resident, part time, less than 15 hrs; per quarter hour	3.00	2.50
Out-of-state resident, full time, 15 hrs; per quarter	105.00	80.00
Out-of-state resident, part time, less than 15 hrs; per qtr. hr.	7.50	6.25
Advance application payment fee (required from full time students following acceptance) will apply to tuition. (Non-refundable)	15.00	15.00
Activities fee, payable at registration, per quarter	4.00	4.00
Laboratory fees — See courses listed	1.00 to	3.00
Late registration fee (paid in addition to registration fee) Full time	5.00	5.00
Late registration fee (paid in addition to registration fee) Part time	2.00	2.00
Transcript fee (no charge for first copy)	1.00	1.00
Change of schedule (each add or drop)	1.00	1.00
Graduation fee	10.00	10.00

Student Insurance Fee—full time students—cost to be determined (will provide coverage for medical care arising out of injury)

Cost of books and supplies, while varying somewhat according to course of study will be approximately $80 per year.

REFUND POLICY

Students who must withdraw from a class or a program must arrange to talk with the Dean of Student Personnel. Tuition refund for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds (2/3) of the student's tuition may be refunded if the student withdraws within ten (10) calendar days after the first day of classes as published in the school calendar. Tuition refunds will not be considered for tuitions of five dollars ($5.00) or less. If a course or curriculum fails to materialize, all the tuition shall be refunded.

VETERANS

Students enrolling at the Community College who wish to use educational benefits under one of the Government bills for veterans should make application to the local Veteran's Administration Office. Correspondence obtained or certificates granted should be discussed with the Dean of Student Personnel prior to registration for classes.

Students in technical and vocational programs will not be classified as full-time students for benefits under the G. I. Bill unless technical students are enrolled for twenty-five clock hours per week and vocational students for thirty clock hours per week.

When in any quarter the total weekly contact hours listed are fewer than this, a student may enroll on request and with the approval of the institution for additional instructional hours to make up this shortage twenty-five hours per week in a technical curriculum or sufficient hours of attendance to make up thirty hours per week in a vocational trade curriculum.

RESIDENCE

To qualify for tuition as a resident of North Carolina, a student 21 years of age or older must certify his legal residence for at least six months preceding the date of his first enrollment. The legal residence of a person under 21 years is that of his parents, or legal guardian.

COURSE LOAD

A degree or diploma student who is registered for at least 12 quarter hours is considered a full-time student. A student may register for up to 21 quarter hours of work, depending upon his capabilities as judged by the faculty.

END-OF-QUARTER ACTIVITIES

The last two weeks of each quarter are reserved for completion of course work, review, and evaluation. Therefore, student extra-curricular and other activities which tend to interfere with these purposes are suspended during this period. Exceptions must be arranged with the Dean of Student Personnel.

WITHDRAWAL

A student who withdraws is expected to confer with his adviser and clear through the Office of the Dean of Student Personnel and the Business Office. Failure to withdraw officially results in automatic assignment of an "F" grade for the work attempted.

When a student withdraws officially before the end of the eighth week, a grade of WP or WF is assigned, depending on whether the work is passing or failing to that date. After eight weeks an F is recorded.

CHANGE IN CURRICULUM

There are times when a student's aptitude and interests may be better served by a change in program. Should a change be advisable the adviser should be consulted to explore possibilities which will serve the interests of the student.

If a change is recommended, final approval must be obtained from the divisional or departmental chairman.

AUDITING COURSES

The auditing of courses is permitted by special arrangement of the Academic Dean and of the instructor involved. Regularly enrolled students may audit courses. Tuition and fees are the same as required credit courses. Part-time students may arrange to take courses and pay all required fees. Auditors receive no credit.

ACADEMIC REGULATIONS

A student may be placed on probation, suspended, or dismissed if he fails to do satisfactory academic work or if he willfully abuses College regulations.

A student must maintain a C.Q.P.A. of 2.0 or better to be in good academic standing. Students who fail to do so are placed on probation, suspended or dismissed.

Student progress is measured by Quality Point Average, or Q.P.A.; the quality of work a student has done at the College through one or more quarters is reflected by his Cumulative Point Average, or C.P.A.

The Quality Point Average is calculated as follows:

1. Allowing 4 points for an A, 3 points for a B, 2 points for a C, 1 point for a D, and O points for an F, multiply the number of points equivalent to the letter grade received in each course by the number of credit hours for the course to arrive at the quality points earned in each course.
2. Divide the sum of the quality points by the total number of credit hours of work; the quotient represents the Quality Points Average for the quarter.

The Cumulative Point Average is determined in the same manner as the Quality Point Average, except that all of the student's work at the College is taken into account.

ACADEMIC PROBATION

Any student whose cumulative qualtity point average is below 2.0 is doing less than satisfactory academic work and will be subject to review by the Academic Committee.

A student making less than 1.5 quality point average following two consecutive quarters is placed on academic probation at which time he is required to consult a counselor.

Failure to reach the minimum standard (1.5 Q.P.A.) in the following quarter will lead to academic ineligibility for one quarter in the particular program the student is pursuing.

SYSTEM OF GRADING

The following grading system is used at Surry Community College:

Letter	Numerical Equivalent	Description	Quality Points
A	93-100	Superior	4
B	85-92	Good	3
C	77-84	Average	2
D	70-76	Passing	1
F	Below 70	Failing	0
I	Incomplete		0
WP	Withdrawn, passing		0
WF	Withdrawn, failing		0

DEANS' LIST

The Dean's List is designed to recognize all students whose academic performance is outstanding.

In order to qualify for the Dean's List, a student must carry at least twelve (12) quarter hours of credit work, maintain a 3.0 quality point average, and have no grade below a C during the quarter.

The Deans' List is published at the end of each quarter.

TRANSFER OF CREDIT

Courses taken at Surry Community College should transfer in grade and credit to the receiving institution as applicable to the curriclum for which such courses were intended. After completing two years of credit work at Surry Community College, the student should be able to transfer with junior status provided his program parallels the pattern of the senior institution. Counselors will assist the student in course selection; however, it is the student's responsibility to familiarize himself with the catalog of the senior institution to which he will transfer.

GRADUATION REQUIREMENTS

Surry Community College grants two degrees, the Associate in Arts Degree for students who complete a College Transfer Program and the Associate in Applied Science Degree for students who complete a two year Technical program. All degree candidates must complete the General Education requirements, applicable to their respective programs in addition to other courses for a minimum of 96 quarter hours, the last 30 of which must be taken at Surry Community College. The student's overall grade point average must be at least 2.0 ("C") on work attempted at Surry Community College.

COMMENCEMENT

Exercises to award degrees and certificates are held at the end of the Spring and or Summer Quarter. The commencement date is listed in the college calendar elsewhere in this catalog.

Candidates for degrees or certificates are expected to attend commencement exercises. It is the responsibility of each student to apply to the Personnel Office for his degree or certificate at the beginning of the last quarter prior to his program completion. The $10 graduation fee must be paid at this time.

GENERAL ADULT EDUCATION DIVISION

This division uses off-campus public school facilities at night in providing a variety of educational opportunities especially planned to meet the needs of adults and out-of-school youths 18 years of age and over. Classes offered, however, are not for college credit. Opportunities are available for adults to obtain pre-high school and high school credit classes, home and family courses, and general interest subjects. Students who desire help in arranging a program consult the Director of Adult Education.

ADULT EXTENSION

Vocational-technical extension courses are part-time courses which do not lead to a diploma or degree, but may qualify for a certificate of completion. Enrollees normally attend training classes to improve competencies, increase skills and understanding. Business firms and industrial companies cooperate with the College Extension Division in offering courses to meet community needs. Classes are held in various county locations.

EVENING DIVISION

The College operates an Evening Division for students and adults interested in pursuing a part-time program. College parallel, technical, and vocational courses are available to qualified students. Classes usually meet one night a week from 7:00 to 10:00 p. m. Evening Division bulletins are available in the College office. Interested students should contact Director of Student Personnel.

COLLEGE PARALLEL DIVISION

College Parallel Studies (Associate in Arts Degree)

In the first two years of college students pursue a program of general education in the areas of humanities, social studies, science, and mathematics. In addition to areas mentioned above, students begin to specialize in work in their own particular fields of interest. Surry Community College provides quality instruction in these areas for transfer credit to senior institutions. The College also provides counseling to help students plan their program for transfer to the college or university of their choice. The student should consult the general regulations relative to admission requirements which apply to all students seeking admission to this College.

COLLEGE TRANSFER PROGRAMS

(Liberal Arts, Engineering, Education, Business Administration)

The Degree of Associate in Arts is conferred by the College when the student has received a minimum of 90 quarter hours credit* and has met the following requirments.

1. General Education Credits	Quarter Hours
Humanities	9
English 101, 102, 103	9
Mathematics	9
Science Sequence (Biology, Chemistry or Physics)	12
Social Science Sequence (plus one additional course)	12
Physical Education	6
2. Electives* (To be decided upon jointly by the student and his adviser.)	39
Total	96

3. An over-all average of "C" on all courses.

*Should include foreign language when transfer to liberal arts institution is anticipated.

NOTES:

1. Ninety quarter hours excludes physical education credits. All students enrolled in college transfer programs must take six quarters of physical education unless cause be shown.

LIBERAL ARTS PROGRAM

(Associate in Arts)

First Year	**Quarter Hours**
English 101 - 102 - 103	9
History 101 - 102 - 103	9
Science Sequence (Biology, Chemistry, Physics)	12
Mathematics 105 - 106 or 101 - 102 - 103	9-10
Physical Education 101 - 102 - 103	3
Electives	5-6
	47-49

Second Year

English 201 - 202	10
Social Science Electives	6
Fine Arts Electives	3
Physical Education 201 - 202 - 203	3
Electives	26
	48

NOTES

1. Foreign language recommended for those students transferring to liberal arts institutions.

PRE-ENGINEERING PROGRAM

(Associate in Arts)

First Year	**Quarter Hours**
English 101 - 102 - 103	9
History 101 - 102 - 103	9
Chemistry 101 - 102 - 103	12
Mathematics (Analytic Geometry, Cal. Sequence)	15
Physical Education 101 - 102 - 103	3
	48

Second Year

English 201 or 203	5
Physics 201 - 202 - 203	12
Engineering Graphics I - II	6
Calculus III, Mathematics	5
Differential Equations, Mathematics	5
Economics 201 - 202 - 203	9
Physical Education 201 - 202 - 203	3
Electives	3
	48

NOTES:

1. Students should confer with adviser in planning program of studies.
2. This program is based on the assumption that pre-engineering students will offer four years of high school credits in mathematics. Any deficiency must be removed before above sequence is followed if junior standing in a four-year institution is desired.
3. Students deficient in high school foreign language credits must include prescribed number of credit hours in above program.

EDUCATION PROGRAM

(Associate in Arts)

A transfer program should be planned with the help of the student personnel office. The program selected should be designed to satisfy the requirements of most teacher training senior institutions. The suggested pattern of courses will meet most of the requirements for transfer at the junior level.

First Year	**Quarter Hours**
English 101, 102, 103	9
History 101, 102, 103	9
Mathematics 101, 102, 103	9
Natural Sciences:	
Biology, Chemistry, Physics	12
Foreign Language or Elective	6-9
Physical Education 101, 102, 103	3
	48-51

Second Year	
English 201, 202, 203	9
History 201, 202, 203	9
Education 201	5
Speech 101	3
Natural Science:	
Biology, Chemistry, Physics	9-12
Psychology 101	5
Physical Education 201, 202, 203	3
Electives	6
	49-52

BUSINESS ADMINISTRATION PROGRAM

(Associate in Arts)

First Year	**Quarter Hours**
English 101 - 102 - 103	9
Science Sequence	
Biology, Chemistry or Physics	12
Mathematics 101 - 102 - 103 or 105 - 106	9-10
Social Science 101 - 102 - 103	9
Physical Education 101 - 102 - 103	3
Electives	5-6
	47-49

Second Year

English 201 - 202	10
Social Science Electives	5-6
Economics 201 - 202 - 203	9
Accounting 131 - 132 - 133	9
Speech 101	3
Introduction to Business	5
Physical Education 201 - 202 - 203	3
Electives	5-6
	49-51

NOTES:
1. Foreign language recommended for those students transferring to liberal arts institutions.

COURSES OF INSTRUCTION

COLLEGE TRANSFER

COURSE NUMBERING SYSTEM

Course designations consist of a three or four letter prefix and a number that indicate the curriclum and the level of the course. Freshman level college transfer courses are indicated by numbers ranging between 100 - 200; sophomore level college transfer courses, 200-300. On the same line, following the prefix and number, appear the course title, the number of lecture and laboratory hours per week, and the number of quarter credit hours earned by successfully completing the course.

ART

ART 101—Art History I **3-0-3**

A general survey of art history against the background of Western culture. The arts of antiquity through Gothic, the periods are studied in relation to their political, religious, and social setting.

ART 102—Art History II **3-0-3**

The art and artists of Europe from the Renaissance to the present time.

ART 130—Introduction to Art **3-0-3**

A beginner's course for those interested in learning to look at, appreciate, and enjoy the visual arts. The elements used to create a work of art are studied through discussion, reference to art works of the past and present, and actual experimentation in the various art media.

ART 131—Drawing I **3-0-3**

The student is encouraged to discover an individual approach to the problems relating to expression and communication in graphic art. Areas of study include life drawing, stressing line, form and contour; landscape and city scape drawing, stressing the elements of proportion, composition and perspective. The student becomes familiar with several graphic media.

ART 132—Drawing 131 **3-0-3**

A continuation of Art 131 emphasizing training in anatomy and life drawing. The relationship of medium to subject and historic and contemporary idioms will be analyzed.

Prerequisite: Art 131.

ART 133—Arts and Crafts **3-2-4**

Provides for the acquisition of skills in the use of varied materials such as art metals, leather, plastics, papier-mache, and linoleum blocks. Designed for teacher education and religious education majors. Also valuable for hobby and leisure time activities. Laboratory periods.

BUSINESS AND ECONOMICS

BUS 101—Introduction to Business **5-0-5**

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management.

Prerequisite: None

BUS 102—Typewriting I **2-3*-3**

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

Prerequisite: None

BUS 103—Typewriting II 2-3*-3

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms.

Prerequisite: BUS 102 or the equivalent. Speed requirement, 30 words per minute for five minutes.

BUS 104—Typewriting III 2-3*-3

Emphasis on production, typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms.

Prerequisite: Speed requirement, 40 words per minute for five minutes.

BUS 106—Shorthand I 3-2-4

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.

Prerequisite: None

BUS 107—Shorthand II 3-2-4

Continued study of theory with greater emphasis on dictation and elementary transcription.

Prerequisite: BUS 106 or the equivalent.

BUS 108—Shorthand III 3-2-4

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.

Prerequisite: BUS 107

BUS 115—Business Law I 3-0-3

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.

Prerequisite: None

BUS 116—Business Law II **3-0-3**

Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership-corporation, mortgages, and property rights.

Prerequisite: BUS 115

BUS 117—Business Law III

Continuation of business law stressing guaranty and suretyship, insurance, landlord and tenant liens, wills, trusts and bankruptcy, and transportation.

BUS 131—Principles of Accounting I **2-3-3**

A study of the procedures of accounting and theory underlying those procedures. Introduction to double entry accounting.

BUS 132—Principles of Accounting II **2-3-3**

A continuation of accounting theory developed in BUS 131 with concentration on single proprietorship and partnerships through the use of balance sheets, income statements and other accounting forms.

Prerequisite: BUS 131

BUS 133—Principles of Accounting III **2-3-3**

A study of accounting as applicable to corporations with a comparison between accounting records as they differ between privately owned and corporately owned enterprises.

Prerequisite: BUS 132.

* Manipulative laboratory

ECO 201-202-203—Principles of Economics **3-0-3**

A study of the present-day economic system; demand supply, prices, and costs; wages, rent, interest, and profit; business cycles, money, banking, and the Federal Reserve System; international trade; and a comparison of Capitalism, Socialism, Communism, and Fascism. (3 credits each quarter.)

ENGINEERING

ENGR 105—Graphics for Engineers I **2-4-3**

Instruction in the use of drafting instruments, freehand drawing, and lettering. Theory of projection, including orthographic multiviews, auxiliary views, and the various kinds of pictorial projections. Sectional views and conventional practices, dimensioning and notations. Representation and specification of threads and fasteners, gears and cams. Working drawings, including limits and tolerances. Concurrent enrollment in College Algebra or higher.

ENGR 106—Graphics for Engeneers II **2-4-3**

Basic descriptive geometry; systematic solutions and analysis of the relationships of points, lines, and planes in space; developments and intersections. Applications of graphics to various fields of engineering. Vector geometry, graphic mathematics, and nomography. Concurrent enrollment in College Trigonometry or higher.

ENGLISH AND SPEECH

ENGL 80—Reading Improvement **5-0-0**

Designed for students desiring to improve comprehension, speed and vocabulary. Diagnostic tests, reading films, accelerators and tachistoscope are used, along with how-to-study materials. Tuition charges: same as for three-credit course.

ENGL 101—Freshman English I **3-0-3**

This course is designed to help the student enrich his knowledge of English grammar, punctuation, sentence and paragraph building, and the use of the dictionary. These mechanics of English will be applied to short themes as required.

Prerequisite: None.

ENGL 102—Freshman English II **3-0-3**

This course is a continuation of College English I, with frequent themes required. Conferences with individual students are recommended. There will be an introduction to principal literary forms by means of selections from modern authors and periodicals.

Prerequisite: English 101

ENGL 103—Freshman English III **3-0-3**

This course emphasizes the development of good prose style and vocabulary development. Long themes, learning to use the dictionary, parallel reading, and a research paper will be required.

Prerequisite: English 102

ENGL 201—Survey of English Literature **5-0-5**

A survey of English Literature from Beowulf to Blake. Emphasis will be placed upon the most outstanding and influential writers of the period, including Shakespeare, Chaucer, and Milton.

Prerequisite: English 101 - 102 - 103

ENGL 202—Survey of English Literature **5-0-5**

A continuation of English 201—from Wordsworth to the Twentieth Century.

Prerequisite: English 101 - 102 - 103

ENGL 203—Survey of American Literature **5-0-5**

A survey of American Literature from 1900 to the present. Emphasis will be on reading rather than literary history.

Prerequisite: English 101 - 102 - 103

ENGL 205—Report Writing **3-0-3**

The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum.

Prerequisite: ENGL 102

ENGL 206—Business Communications **3-0-3**

Develops skills in techniques in writing business communications. Emphasis is placed on writing action-getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgments, remittances, and inquiry.

Prerequisite: ENGL 102

SPEECH 101—Fundamentals of Speech I 3-0-3

This Course involves the study and application of the fundamentals of extemporaneous speaking. Consideration of the mechanics of speech is involved, with emphasis on oral reading as a means of improving voice and articulation. The development of proficiency in public speaking is encouraged through an introduction to the informative speech, the persuasive speech and group discussion. Students use audio aid in weekly laboratory sessions at the Communication Center.

Prerequisite: One quarter of Freshman English

SPEECH 102—Speech II 3-0-3

A study of oral interpretation of literature including the ballad, lyric and narrative poetry, the article and short story; dramatic reading from Shakespeare, Bible, and other sources; and an introduction to the principles of argumentation and debate.

FOREIGN LANGUAGES

FRE 101—Elementary French I 2-3-3

An introduction to French, with a modern audio-lingual approach. Up-to-date materials and methods. Emphasis first on hearing and speaking, then on reading and writing. Lab work is required as a part of the course for those with no previous French or those who do not make a satisfactory score on the French placement test.

Prerequisite: Satisfactory score on college placement test.

FRE. 102—Elementary French II 2-3-3

A continuation of FRE 101.

Prerequisite: FRE 101

FRE 151—Intermediate French I 2-3-3

A review of the skills of hearing, speaking, reading, and writing. Audio-lingual work in class and in lab. Selected supplementary readings.

Prerequisites: Two units of high school French and a satisfactory placement test score or FRE 101 and FRE 102.

FRE 152—Intermediate French II **2-3-3**

A continuation of French 151.

Prerequisite: FRE 151.

FRE 201—Survey of French Civilization I **2-3-3**

The first of a two-course sequence. A study of French culture and civilization. Selected readings in French literature from the Middle Ages to the present. Parallel reading and reports.

Prerequisite: FRE 152.

FRE 202—Survey of French Civilization II **2-3-3**

A continuation of French 201.

Prerequisite: FRE 201.

SPA 101—Elementary Spanish I **2-3-3**

An introduction to Spanish, with a modern, audio-lingual approach. Up-to-date materials and methods. Emphasis first on hearing and speaking, then on reading and writing. Lab work is required as part of the course for those with no previous Spanish or those who do not make satisfactory score on Spanish placement tests.

Prerequisite: Satisfactory score on college placement tests.

SPA 102—Elementary Spanish II **2-3-3**

A continuation of Spanish 101.

Prerequisite: SPA 101.

SPA 151—Intermediate Spanish I **2-3-3**

A review of the skills of hearing, speaking, reading and writing. Audio-lingual work in class and in lab. Selected supplementary readings.

Prerequisites: Two units of high school Spanish and a satisfactory placement test score, or SPA 101 and SPA 102.

SPA 152—Intermediate Spanish II **2-3-3**

A continuation of Spanish 151.

Prerequisite: SPA 151.

SPA 201—Survey of Spanish Civilization I 2-3-3

The first of a two-course sequence. A study of Spanish culture and civilization. Selected readings in the literature of Spain and Spanish American from the Middle Ages to the present. Parallel reading and reports.

Prerequisite: SPA 152.

SPA 202—Survey of Spanish Civilization II 2-3-3

A continuation of Spanish 201.

Prerequisite: SPA 201.

MATHEMATICS

MATH 80 - 81 - 82—Remedial Mathematics No Credit

A three-quarter, three-hour per week course consisting of an intensive study of pre-college Algebra and Geometry and of the arithmetical skills necessary in a study of college-level mathematics.

(Any student with less than two years of high school preparatory mathematics must enroll in the Mathematics C 80, 81, 82 sequence. It is required that no such student be allowed to enroll in a higher level course until at least two quarters of this sequence be satisfactorily completed. It is also expected that any student who enrolls in non-credit courses shall not enroll in a higher level credit course until the work is satisfactorily completed.)

MATH C 101 - 102—College Mathematics I, II 3-0-3

A two quarter course which, along with C 103, will comprise the minimum college requirements for all AA degree candidates. These two quarters will consist of a study of sets, logic and axiomatic development of number systems (excluding complex numbers). Ideas of mathematical language and proof applied to elementary algebra. Some Number Theory including different bases, congruences and modular systems. Brief treatment of probability and statistical methods. Math 101 is a prerequisite for Math 102. Three quarter hours each quarter.

MATH C 103—College Mathematics III **3-0-3**

A continuation in the spirit of C 101 - 102 but including algebraic and graphical solutions of systems, linear equations and inequalities followed by elementary linear programming. Some finite and modern geometries and a non-analytical study of trigonometry. Attempts will be made to introduce the rudiments of Plane Analytic Geometry at least through consideration of standard positions of the conic sections.

Prerequisite: Math 101 - 102. Three quarter hours.

MATH 105 - 106—College Algebra and Trigonometry **5-0-5**

Designed to promote understanding of the logic structure of algebra and the development of algebraic techniques, along with a study of analytic trigonometry. Topics include: the theory of sets for integers, rational numbers, real numbers, complex numbers, polynomials; also mathematical induction, groups and fields, equations, inequalities, functions and relations, exponential and logarithmic functions, trigonometric functions, identities, equations, circular functions, inverse functions, triangle solution including sine and cosine laws. (5 hours credit each quarter.)

MATH 107—Analytic Geometry **5-0-5**

"A non-integrated course which covers a detailed study of Algebraic and Cartesian properties of the Conic Sections and of some curves of higher order in preparation for a study of The Calculus.

Prerequisite: Math 106 or by permission of staff."

MATH 205 - 206 - 207—The Calculus **5-0-5**

A study of variables, functions, limits, differentiation, integration with applications both geometrical and physical. Areas under curves, volumes of solids, centroids, moments of inertia, force and work are investigated in rectangular, polar and parametric form. (5 hours credit each quarter.)

Prerequisite: Math 105 - 106 - 107.

MATH 208—Differential Equations **5-0-5**

Special non-linear equations, linear equations, transformations, symbolic method; solutions in series; Gauss, Bessel and Legendre equations; simultaneous differential equations.

Prerequisite: MATH 205 - 206 - 207.

MUSIC

MUSIC 101—Introduction to Music **3-0-3**

A non-technical course in music appreciation. Musical elements such as rhythm, harmony, tone, color, and form are analyzed and discussed. Musical masterworks are employed to develop on understanding of the role of music in contemporary culture.

MUSIC 102—History of Music **3-0-3**

A non-technical course in music appreciation. The growth of music from its beginning to the Modern Era. Representative works of various composers and periods are presented for analysis and discussion.

MUSIC 103 - 104 - 105—College Chorus **0-2-1**

A study of vocal techniques and choral interpretation. Ensemble singing including the performance of works from standard choral repertory. Voice range audition is required of all students. Attendance at rehearsals and performance is expected. The course is open to all students. Meets two hours per week for one credit.

PHYSICAL EDUCATION

MEN

PHY ED 101—Soccer, Touch Football, and Physical Fitness (Fall Quarter) **0-2-1**

The course consists of a physical fitness testing program at the beginning of the quarter. The fundamentals of soccer and touch football are taught with emphasis on skills and knowledge of the rules. Written and skill test are given each quarter to help evaluate the students' progress.

PHY ED 102—Stunts, Tumbling, Wrestling, and Physical Fitness (Winter Quarter) **0-2-1**

Physical fitness tests are given to each student. The fundamentals of stunts and tumbling are taught at the beginning of the course. The course ends with wrestling fundamentals.

PHY ED 103—Softball, Golf, and Physical Fitness (Spring Quarter) **0-2-1**

Physical fitness tests are given to each student. Softball and golf fundamentals, rules and game situations are taught.

WOMEN

PHY ED 101—Soccer, Speedball, and Physical Fitness (Fall Quarter) **0-2-1**

The fundamental techniques and skills of the games will be taught. For evaluation purposes, written and skill tests will be given. Physical fitness will be an integral part of the program throughout the year.

PHY ED 102—Stunts and Tumbling, Bowling, and Physical Fitness **0-2-1**

The basic fundamental techniques and skills of gymnastics and the game of bowling will make up the winter program.

PHY ED 103—Softball, Archery, and Badminton (Spring Quarter) **0-2-1**

The fundamental techniques and skills of softball, archery, and badminton will be emphasized along with rules and game situations.

MEN

PHY ED 201—Volleyball, Badminton, and Physical Fitness. (Fall Quarter) **0-2-1**

The physical fitness program is continued from the freshman year of physical education. The fundamentals of volleyball and badminton are taught with emphasis on skills and knowledge of the rules.

PHY ED 202—Table Tennis, Shuffleboard, Bowling, and Physical Fitness. (Winter Quarter) **0-2-1**

The physical fitness program is continued. Emphasis is placed on the carry-over value of these sports for lifetime.

PHY ED 203—Archery, Tennis, and Physical Fitness (Spring Quarter) **0-2-1**

Individual sports are emphasized this quarter. The skills and rules of archery and tennis are taught. The physical fitness program is continued.

WOMEN

PHY ED 201—Golf, Volleyball, and Physical Fitness (Fall Quarter) **0-2-1**

The fundamental skills and techniques of golf and volleyball will make up the program.

PHY ED 202—Table Tennis, Shuffleboard, Advanced Stunts and Tumbling (Winter Quarter) **0-2-1**

The games of table tennis and shuffleboard emphasizing skills and techniques will be taught. Advanced gymnastics will complete our winter program.

PHY ED 203—Tennis, Track and Field, and Physical Fitness (Spring Quarter) **0-2-1**

The game of tennis including the skills and techniques of the game will be taught. Track and field will include many and varied running, jumping, and throwing events.

PHY ED 205—Personal and Community Hygiene **3-0-3**

The study of hygiene and the application of medical science to personal and community living.

SCIENCE—BIOLOGICAL

BIOL 101—Principles of Botany **3-3-4**

A study of the structure, growth, physiology, and reproduction of plants. (Note: Biology 101, 102, 103 constitutes a year's sequence in biology.)

BIOL 102—General Zoology I **3-3-4**

A survey of the invertebrates with emphasis on the structure, behavior, reproduction, and ecology of representative forms.

BIOL 103—General Zoology II **3-3-4**

A brief survey of the structure, function, and development of invertebrates, and an introduction to embryology and genetics.

Prerequisite: Bio. 102.

BIOL 104—Anatomy and Physiology I (Fall and Winter)

This is a basic course of the structure and function of the human body as related to nursing training. The body as an integrated whole, the moving body, body control, maintaining the metabolism of the body, reproduction, and control of body functions are the major topics of instruction. The laboratory sessions are correlated with the material in the lecture sessions to give the student practical experience in the basic phases of the course.

BIOL 201—Local Flora **3-4-5**

A field and laboratory study of local flora concerned with their classification, identification, and ecology by the use of keys and field studies.

Prerequisites: Bio. 101, 102, and 103.

BIOL 203—Comparative Vertebrate Anatomy **3-4-5**

An anatomical study of representative vertebrates including considerations of their morphology, physiology, ecology, and evolution.

Prerequisites: Bio. 101, 102, and 103.

BIOL 111—Nutrition I **3-0-3**

A study of the essentials of an adequate diet. Topics considered are energy, protein, mineral and vitamin requirements, metabolism, deficiencies in the diet and their effects, and diet in relation to age and physical condition.

SCIENCE—CHEMISTRY

CHEM 101—General Chemistry I 3-3-4

A course providing instruction in language of chemistry; fundamental chemistry laws and theories, preparation and properties of elements and their compounds.

CHEM 102—General Chemistry II 3-3-4

A continuation of 101 to include the following concepts; chemical change, kinetic-molecular theory and atomic structure compound formation. Emphasis is placed on the mastery of formula and equation writing and of chemical calculations.

CHEM 103—General Chemistry III 3-3-4

A continuation of 102 with emphasis placed on gas laws, calculation of formulas, weight and volume relationships, equivalent weight, standard solutions, chemical equilibrium, redox and electro chemistry, Introduction to organic and nuclear chemistry.

CHEM 201—Qualitative Analysis 3-3-4

A course which extends the study of chemical principles to include equilibra of slightly soluble salts and of complex ions and systematic analysis. Laboratory consists of the qualitative analysis of both principles and techniques of separation and identification of inorganic cations and anions.

Prerequisite: 103 or permission of instructor.

SCIENCE—PHYSICS

PHY 201—General Physics I 3-2-4

This course designed primarily for physics and engineering (and technology) majors includes in the first quarter of study the following: machines and vector analysis, partial and rigid body mechanics, statics, and rotary motion.

Prerequisite: Math 112.

PHY 202—General Physics II **3-2-4**

Second quarter of general physics includes the study of heat, sound, light, wave motions, and optics.

PHY 203—General Physics III **3-2-4**

Final quarter of general physics includes the study of electricity, magnetism, atomic and nuclear physics.

SOCIAL SCIENCE

HIST 101-102-103—History of Western Civilization (Continuous Study) **3-0-3**

The institution and culture of Western Society from 5,000 B. C. to the present. Topics include the pre-classical Greek and Roman worlds, the growth of Christianity, Medieval Europe, the Renaissance, the Reformation, the emergence of the modern national state, the rise of commercial Capitalism, the Industrial Revolution, the French Revolution, liberalism, nationalism, the alliance system, Imperialism, World War II and its aftermath, and the ideologies of the twentieth century.

Prerequisite: None. (3 credits each quarter)

HIST 201-202-203—American History **3-0-3**

A survey of American History from the period discovery and colonization to the present. The course is conducted through lectures, text books, collateral readings, and map studies.

Prerequisite: None. (3 credits each quarter)

HIST 204—Current World Problems **3-0-3**

Current problems in international affairs and their significance for the modern world are analyzed. The course draws upon history, geopolitics and cultural anthropology in examining some of the tension areas of the world. Consideration is given to the Latin, Slavic, Arabic, Hindu, Chinese, and African cultures and America's relationship to them. A study is made of current international organizations.

Prerequisite: One year of History, or permission of the instructor.

POL SCI 201—American National Government 3-0-3

A study of the formation and development of the national government, its organization, functions and powers.

POL SCI 202—American Sate and Local Government 3-0-3

A study of the organization, functions, and powers of state and local government in the United States.

GEOGRAPHY

GEO 201—Physical Geography 3-0-3

The earth's astronomical relations, factors of weather and climate, and physical features.

GEO 202—Economic Geography 3-0-3

Geographic factors involved in production, distribution, consumption, and conservation of the major crops, minerals, and industries of the world.

PSYCHOLOGY

PSYCH 101—General Psychology 5-0-5

An introductory survey of psychology. Topics include pre- and post-natal development, the structure and functions of the nervous systems and glands, sensory organs and processes, intelligence, aptitudes and abilities, perception, motivation, learning, emotion, personality, and adjustment.

PSYCH 201—Human Development 5-0-5

Development of the normal child and adolescent, with consideration of the social, biological and cultural influences upon growth.

Prerequisite: Psy. 101

SOCIOLOGY

SOC 201—Introduction to Sociology **3-0-3**

A study of the fundamental principles and concepts of sociology, with emphasis on contemporary American institutions in relation to technological change, ethnic groups, population trends and social control.

SOC 202—Marriage and the Family **3-0-3**

A study of the family as a social institution—its origins and development, its forms and functions, its interrelation with other social institutions, and its role in contemporary civilization. In connection therewith, a study is made of sex development, differentiations, social relationships between the sexes, and factors contributing to or mitigating against successful, stable marriages.

HUMANITIES

EDU 201—Introduction to Education **5-0-5**

A course designed to acquaint the prospective teacher with four major aspects of education: the teaching profession, the school system, the teacher, and the pupil.

PHI 201—Intro. to Philosophy **5-0-5**

A study of the fundamental problems of philosophy, emphasizing the importance of philosophical thinking for man's everyday expererience; an examination of typical ideas and systems of ideas throughout history.

REL 205—Comparative Religion **3-0-3**

A comparative study of the major religions of the world, both ancient and modern. An analysis of major religious concepts with attention given to the effects on contemporary history.

Prerequisite: sophomore standing or permission of the instructor.

COLLEGE TECHNICAL DIVISION

The programs in the technology areas are designed to prepare students with technical competence for immediate employment in either business, industry, government, the health occupations fields, or as owner-manager of their firms. General education subjects are included as necessary adjuncts to these occupational programs.

The student should thoroughly understand that technical programs are not intended to transfer later to senior colleges. Upon successful completion of a technical program of study, the Associate Degree in Applied Science is awarded.

Programs of Study

Business Options:
- General Business Management
- Executive Secretarial
- Technical Secretarial
- Agricultural Business

Technology Options:
- Electronics Technology
- Drafting and Design Technology

GENERAL BUSINESS MANAGEMENT

The General Business Management Curriculum is designed to prepare the student for employment in one of many occupations common to business. Training is aimed at preparing the student in many phases of administrative work that might be encountered in the average business.

The graduate of the Business Management Curriculum may enter a variety of career opportunities from beginning sales person or office clerk to manager trainee. The duties and responsibilities might include: making up and filing reports, tabulating and posting data in various books, sending out bills, checking calculations, adjusting complaints, operating various office machines, and assisting managers in supervising. Positions are available in businesses such as advertising, banking, credit, finance, retailing, wholesaling, tourist, and travel industry, insurance, transportation and communication.

GENERAL BUSINESS MANAGEMENT

(Associate in Applied Science)

First Quarter		**Lec.**	**Lab.**	**Credit**
ENG 101	English I	3	0	3
BUS 102	Typewriting I	2	3	3
T-BUS 105	Business Mathematics	5	0	5
BUS 131	Accounting I	2	3	3
ECO 201	Economics I	3	0	3
		15	6	17

Second Quarter				
ENG 102	English II	3	0	3
BUS 132	Accounting II	2	3	3
ECO 202	Economics II	3	0	3
BUS 101	Introduction to Business	5	0	5
BUS 115	Business Law I	3	0	3
		16	3	17

Third Quarter				
ENG 103	English III	3	0	3
BUS 133	Accounting III	2	3	3
T-BUS 123	Business Finance	3	0	3
T-BUS 110	Office Machines	2	2	3
BUS 116	Business Law II	3	0	3
		13	5	15

Fourth Quarter				
SPEECH 101	Fundamentals of Speech I	3	0	3
T-BUS 232	Sales Development	3	0	3
T-BUS 239	Marketing	3	0	3
T-EDP 104	Introduction to Data Processing	3	2	4
BUS 117	Business Law III	3	0	3
		15	2	16

Fifth Quarter

T-ENG 206	Business Communications	3	0	3
	Social Science Elective	3	0	3
T-BUS 243	Advertising	3	0	3
T-BUS 235	Business Management	3	0	3
	Elective	3	0	3
		15	0	15

Sixth Quarter

	Social Science Elective	3	0	3
T-BUS 229	Taxes	3	2	4
T-BUS 272	Principles of Supervision	3	0	3
T-BUS 271	Office Management	3	0	3
	Elective	3	0	3
		15	2	16

SECRETARIAL — EXECUTIVE

The demand for qualified secretaries in our ever-expanding business world is becoming more acute. The purpose of this curriculum is to outline a program that will provide training in the accepted procedures required by business and industry.

The Executive Secretary Curriculum is designed to offer the students the necessary secretarial skills in typing, dictation, transcription, and terminology for employment. The special training in secretarial subjects is supplemented by related courses in mathematics, accounting, business law, and personality development.

The graduate executive secretary should have a knowledge of business terminology, skill in dictation and accurate transcription of business letters and reports. The graduate may be employed as a stenographer or a secretary. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, or reports. The secretary, in addition to taking dictation and transcribing, is give more responsibility in connection with meeting office callers, screening telephone calls, and being an assistant to an executive. She may enter a secretarial position in a variety of offices in businesses such as insurance companies, banks, marketing institutions, and financial firms.

SECRETARIAL — EXECUTIVE

(Associate in Applied Science)

First Quarter		**Lec.**	**Lab.**	**Credit**
ENG 101	English I	3	0	3
BUS 102	Typewriting I	2	3	3
T-BUS 105	Business Mathematics	5	0	5
BUS 131S	Secretarial Accounting I	2	3	3
BUS 106	Shorthand I	3	2	4
		15	8	18

Second Quarter				
ENG 102	English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 107	Shorthand II	3	2	4
T-BUS 132S	Secretarial Accounting II	2	3	3
T-BUS 101	Introduction to Business	5	0	5
		15	8	18

Third Quarter				
ENG 103	English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 108	Shorthand III	3	2	4
T-EDP 104	Introduction to Data Processing	3	2	4
	Elective	3	0	3
		14	7	17

Fourth Quarter				
ENG 204	Fundamentals of Speech I	3	0	3
T-BUS 206 E	Dictation & Transcription	3	2	4
T-BUS 205	Advanced Typing	2	3	3
T-BUS 110	Office Machines	2	3	3
	Elective	3	0	3
		13	8	16

Fifth Quarter

T-ENG 206	Business Communications	3	0	3
T-BUS 207 E	Dictation & Transcription (Executive)	3	2	4
T-BUS 214	Secretarial Procedures	3	2	4
	Social Science Elective	3	0	3
T-BUS 211	Office Machines II	2	2	3
		14	6	17

Sixth Quarter

	Social Science Elective	3	0	3
T-BUS 208 E	Dictation & Transcription (Executive)	3	2	4
T-BUS 271	Office Management	3	0	3
	Electives	6	0	6
		15	2	16

Electives may be chosen from College Parallel or Technical Programs.

AGRICULTURAL BUSINESS TECHNOLOGY

Agriculture in the United States is undergoing major changes. A highly effective production machine, coupled with technological advances, is constantly eliminating the unprepared, the under capitalized and less efficient. These changes have given rise to the need for more technically trained people. The agricultural business curriculum combines studies in agriculture with intensive business training to prepare young men and women for the many and varied fields of employment in business and industry allied with agriculture.

Successful completion of this program should enable an individual to find employment in such areas as plant supervision, management of farm supply stores, farm chemical supplies, field servicemen, inspection of farm products, office management, farm product marketing, farm management and agricultural research.

AGRICULTURAL BUSINESS TECHNOLOGY

(Associate in Applied Science)

First Quarter		**Lec.**	**Lab.**	**Credit**
ENG 101	English I	3	0	3
BUS 131	Accounting I	2	3	3
T-BUS 105	Business Mathematics	5	0	5
T-AGR 125	Animal Science	5	2	6
		15	5	17

Second Quarter				
ENG 102	English II	3	0	3
T-AGR 185	Soil Science	5	2	6
BUS 132	Accounting II	2	3	3
T-AGR 104	Introduction to Ag. Economics	3	2	4
BUS 115	Business Law I	3	0	3
		16	7	19

Third Quarter				
ENG 103	English III	3	0	3
T-BUS 123	Business Finance	3	0	3
BUS 133	Accounting III	2	3	3
T-AGR 170	Plant Science	5	2	6
BUS 116	Business Law II	3	0	3
		16	5	18

Fourth Quarter				
ENG 204	Fundamentals of Speech I	3	0	3
T-BUS 232	Sales Development	3	0	3
T-AGR 204	Farm Business Management	3	2	4
T-BUS 110	Office Machines I	2	2	3
BUS 117	Business Law III or Elective	3	0	3
		14	4	16

Fifth Quarter

T-AGR 205	Agricultural Marketing	3	2	4
T-AGR 201	Agricultural Chemicals	5	2	6
T-BUS 111	Office Machines II	3	0	3
	Elective	3	0	3
		14	4	16

Sixth Quarter

T-AGR 228	Livestock Diseases & Parasites	3	2	4
T-AGR 218	Agricultural Mechanization	3	2	4
	Social Science Elective	3	0	3
	Elective	5	0	5
		14	4	16

ELECTRONICS TECHNOLOGY

The field of electronics has developed at a rapid pace since the turn of the century. Developments in the field of electronic controls and the demands for new products in the consumer market have revolutionized the industry.

Many opportunities exist for men and women with a technical education. This curriculum provides a basic background in electronic theory and practical applications of electronics for business and industry. Graduates are capable of handling a variety of positions that involve the operation, design, research, testing and sale of electronic equipment.

Sample job titles are: Communications Systems Engineer, Customer Service Engineer, Electronic Field Engineer, Junior Engineer, Technical Aide, Engineering Aide, Technical Sales Representative, Computer Technician, Technical Writer.

The courses in this curriculum are not designed for transfer to a senior college or university, but may be acceptable in some engineering schools.

Applicants for the Electronics Technology program should have a strong background in English, mathematics, and science, and should have demonstrated good performance in these and other subjects.

ELECTRONICS TECHNOLOGY

(Associate in Applied Science)

First Quarter		**Lec.**	**Lab.**	**Credit**
ENG 101	English I	3	0	3
T-MAT 101	Technical Mathematics I	5	0	5
PHY 101	Physics: Properties of Matter	3	2	4
T-DFT 101	Technical Drafting I	0	6*	2
T-ELC 101	Fundamentals of Electricity I	4	4-6	6
		15	12-14	20

Second Quarter				
ENG 102	English II	3	0	3
T-MAT 102	Technical Mathematics II	5	0	5
PHY 102	Physics: Work, Energy, Power	3	2	4
T-DFT 102	Technical Drafting II	0	6*	2
T-ELC 102	Fundamentals of Electricity II	4	4-6	6
		15	12-14	20

Third Quarter				
ENG 103	English III	3	0	3
T-MAT 103	Technical Mathematics III	5	0	5
T-ELN 101	Electronic Instruments and Measurements	1	4-6	3
T-ELN 105	Control Devices	5	4-6	7
		14	8-12	18

Fourth Quarter				
ENG 204	Fundamentals of Speech I	3	0	3
T-MAT 201	Technical Mathematics IV	5	0	5
T-PHY 104	Physics: Light and Sound	3	2	4
T-ELN 205	Applications of Vacuum Tubes and Transistors	5	4-6	7
		16	6-8	19

Fifth Quarter

	Social Science Elective	3	0	3
T-ELN 210	Semiconductor Circuit Analysis	5	2-3	6
T-ELN 214	Wave Shaping and Pulse Circuits	2	2-3	3
	Elective			3
		10	4-6	15

Sixth Quarter

	Social Science Elective	3	0	3
T-ELN 215	Wave Shaping and Pulse Circuits	2	2-3	3
T-ELN 220	Electronic Systems	5	4-6	7
	Elective			3
		10	6-9	16

* "Manipulative laboratory" involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

DRAFTING AND DESIGN — MECHANICAL

This curriculum has been designed to train persons to obtain employment and to enable the individual student to develop a high proficiency after employment in the industry. Because technicians associate with administrative personnel, scientists, engineers, and skilled workmen, courses in general education have been included. Courses containing essential information from related areas, such as mathematics, physics, and mechanics are also necessary and have been included to provide the student with an academic foundation for his training.

Mechanical drafting and design technicians are concerned with the preparation of drawings for design proposals, for experimental models and items for production use.

These technicians perform many aspects of drafting in a specialized field, such as the developing of the drawing of a section, sub-assembly or major component. Investigating design factors and availability of material and equipment, production methods and facilities are frequent assignments. They assist in

the design of units and controls from specifications by utilizing drawings of existing units and reports on functional performance. They may draw components in industrial fields based on engineers' original design concepts or specific ideas. Also, they may be assigned as coordinators for the execution of related work of other design, production, tooling, material and planning groups. Technicians with experience in this classification may often supervise the preparation of working drawings.

These technicians are employed in many types of manufacturing, fabrication, research, development and service industries. Substantial numbers also are employed in communications, transportation, public utilities, consulting engineering firms, and federal, state, and local governments.

Applicants for the Drafting and Design program should have a strong background in English, mathematics, and science, and should have demonstrated good performance in these subjects.

DRAFTING AND DESIGN TECHNOLOGY (MECHANICAL)

(Associate in Applied Science)

First Quarter		**Lec.**	**Lab.**	**Credit**
ENGL 101	English I	3	0	3
T-MAT 101	Technical Mathematics I	5	0	5
PHY 101	Physics: Properties of Matter	3	2	4
T-DFT 101	Technical Drafting I	0	6*	2
T-MEC 101	Machine Processes I	0	6*	2
		11	14	16

Second Quarter				
ENGL 102	English II	3	0	3
T-MAT 102	Technical Mathematics II	5	0	5
PHY 102	Physics: Work, Energy, Power	3	2	4
T-DFT 102	Technical Drafting II	0	6*	2
T-MEC 102	Machine Processes II	0	6*	2
		11	14	16

Third Quarter

ENG 103	English III	3	0	3
T-MAT 103	Technical Mathematics III	5	0	5
PHY 103	Physics: Electricity	3	2	4
T-PHY 106	Applied Mechanics	5	0	5
T-DFT 103	Technical Drafting III	0	6*	2
		16	8	19

Fourth Quarter

ENGL 204	Fundamentals of Speech I	3	0	3
T-DFT 201	Technical Drafting IV	2	6*	4
T-DFT 204	Descriptive Geometry	2	4	4
T-MEC 205	Strength of Materials	3	2	4
T-MEC 210	Physical Metallurgy	3	3*	4
		13	15	19

Fifth Quarter

	Social Science Elective	3	0	3
T-DFT 205	Design Drafting I	2	6*	4
T-DFT 211	Mechanisms	3	2	4
T-MEC 211	Physical Metallurgy	3	3*	4
	Elective	4	0	4
		15	11	19

Sixth Quarter

	Social Science Elective	3	0	3
T-DFT 206	Design Drafting II	2	6*	4
T-MEC 235	Hydraulics and Pneumatics	3	3*	4
	Elective	4	0	4
	Elective	4	0	4
		16	9	19

* "Manipulative laboratory" involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

TECHNICAL DIVISION

COURSES OF INSTRUCTION

(AGRICULTURAL, BUSINESS and SECRETERIAL)

Technical Course Numbering System:

All technical courses are numbered from 100 to 299 and prefixed with a T followed by a three-letter symbol. The T prefix indicates that the course is in the two year technical program and is not designed for transfer credit. On the same line, following the prefix and number, appear the course title, the number of lecture and laboratory hours per week, and the number of quarter credit hours earned by successfully completing the course.

Some courses in the technical curricula are the same as those shown in the college transfer programs. Descriptions for courses in the curricula which do not carry the T prefix can be found in the College Transfer section of this catalog.

Courses should be taken in proper sequence with prerequisite courses elected as advised.

AGRICULTURAL

T-AGR 104—Introduction to Agricultural Economics 3 2 4

An introduction to economics, the functions of the economic system and agriculture's role in the economy. A review of the functions of the manager and an introduction to the principles he uses in making decisions to adjust to changing conditions. Analysis of the main sources of change which affect agricultural firms.

Prerequisite: None

T-AGR 125—Animal Science 5 2 6

An introductory animal science course covering the fundamental principles of livestock production. A study of the animal body and the basic principles of reproduction, genetics, growth, fattening, digestion, along with the selection, feeding, improvement, processing, and marketing of livestock.

Prerequisite: None

T-AGR 170—Plant Science 5 2 6

An introductory general botany and crop science course covering the fundamental principles of the reproduction, growth, functions, and development of seed-bearing plants with application to certain commercially important plants in North Carolina.

Prerequisite: None

T-AGR 180—General Poultry Science 3 2 4

An introduction to the science of poultry production. The major phases of the study include the history of the poultry industry; the anatomy and physiology of the chicken; the breeds and varieties; the breeding principles, the principles of incubation, brooding, rearing, feeding, housing and management; marketing poultry products; and the science of disease and parasite prevention and control.

Prerequisite: None

T-AGR 185—Soil Science and Fertilizers 5 2 6

A course dealing with basic principles of efficient classification, evaluation, and management of soils; care, cultivation, and fertilization of the soil, and conservation of soil fertility.

Prerequisite: None

T-AGR 201—Agricultural Chemicals 5 2 6

A study of farm chemical pesticides, their ingredients, formulation, and farm application, with emphasis on the effective and safe use of chemicals in agricultural pest control.

Prerequisite: None

T-AGR 204—Farm Business Management 3 2 4

A review of the functions of the manager of a business firm and the problems he faces. Development of the concept of planning by both partial and complete budgeting. Review of the concepts of costs and the length of run in production. Practice in preparing enterprise budgets as an aid in choosing what to produce. Use of partial budgeting to find the least cost production procedure. Analysis of production data to select the level of production that yields the most net revenue. Relationship between size, efficiency and income of a form. Review of procedures for evaluating the efficiency of the manager.

Prerequisite: T-AGR 104.

T-AGR 205—Agricultural Marketing 3 2 4

An analysis of the functions of marketing in the economy and a survey of the problems marketing faces. A review of the market structure and the relationship of local, terminal, wholesale, retail and foreign markets. Problems in the operations of marketing firms including buying and selling, processing, standardization and grading, risk taking and storage, financing, efficiency, and cooperation. Discussion of procedures of marketing such commodities as grain, cotton, livestock and tobacco.

T-AGR 218—Agricultural Mechanization 3 2 4

A study of farm machinery management and labor-saving devices. The economics of selection and operation of farm machinery. Study and evaluation of feed grinders, and mixers, storage facilities, materials handling systems and other labor-saving devices.

Prerequisite: None

T-AGR 228—Livestock Diseases and Parasites 3 2 4

A course dealing with the common diseases and parasites of livestock; sanitation practices and procedures with emphasis on the cause, damage, symptoms, prevention and treatment of parasites and diseases, and management factors relating to disease and parasite prevention and control.

Prerequisite: T-AGR 125.

BUSINESS AND ECONOMICS

BUS 101—Introduction to Business 5 0 5

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, & management.

Prerequisite: None.

BUS 102—Typewriting I 2 3* 3

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

Prerequisite: None.

BUS 103—Typewriting II 2 3* 3

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms.

Prerequisite: BUS 102 or the equivalent. Speed requirement, 30 words per minute for five minutes.

BUS 104—Typewriting III 2 3* 3

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms.

Prerequisite: BUS 103 or the equivalent. Speed requirement, 40 words per minute for 5 minutes.

T-BUS 105—Business Mathematics 5 0 5

This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business.

Prerequisite: None.

BUS 106—Shorthand I 3 2 4

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.

Prerequisite: None.

BUS 107—Shorthand II 3 2 4

Continued study of theory with greater emphasis on dictation and elementary transcription.

Prerequisite: BUS 106 or the equivalent.

BUS 108—Shorthand III 3 2 4

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.

Prerequisite: BUS 107.

T-BUS 110—Office Machines I 2 2 3

A general survey of the business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard machines, and calculator.

Prerequisite: None.

T-BUS 111—Office Machines II 2 2 3

Instruction in the operation of the bookkeeping-accounting machines, duplicating equipment, and the dictating and transcribing machines.

Prerequisite: T-BUS 110.

BUS 115—Business Law I 3 0 3

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.

Prerequisite: None.

BUS 116—Business Law II 3 0 3

Includes the study of laws pertaining to bailments, sales, riskbearing, partnership - corporation, mortages, and property rights.

Prerequisite: BUS 115.

BUS 117—Business Law III 3 0 3

Continuation of business law stressing guaranty and suretyship, insurance, landlord and tenant liens, wills, trust and bankruptcy, and transportation.

Prerequisite: BUS 116.

T-BUS 123—Business Finance I 3 0 3

Financing of business units, as individuals, partnerships, corporations, and trusts. A detailed study is made of short-term, long-term, and consumer financing.

Prerequisite: None.

T-BUS 124—Business Finance II 3 0 3

Financing, federal, state, and local government and the ensuing effects upon the economy. Factors affecting supply of funds, monetary and credit policies.

Prerequisite: T-BUS 123

BUS 131—Principles of Accounting I 2 3 3

A study of the procedures of accounting and theory underlying those procedures. Introduction to double entry accounting.

BUS 132—Principles of Accounting II 2 3 3

A continuation of accounting theory developed in BUS 131 with concentration on single proprietorship and partnerships through the use of balance sheets, income statements and other accounting forms.

Prerequisite: BUS 131.

BUS 133—Principles of Accounting III 2 3 3

A study of accounting as applicable to corporations with a comparison between accounting records as they differ between privately owned and corporately owned enterprises.

Prerequisite: BUS 132.

T-BUS 131S—Accounting-Secretarial 2 3 3

Principles, techniques and tools of accounting, for understanding of the mechanics of accounting, Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned.

Prerequisite: T-BUS 105.

T-BUS 132S—Accounting-Secretarial 2 3 3

Partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting data for management control as well as on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.

T-BUS 205—Advanced Typewriting 2 3* 3

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation, and the typing of reports, manuscripts and legal documents.

Prerequisite: BUS 104. Speed requirement, 50 words per minute for 5 minutes.

T-BUS 206E—Dictation and Transcription 3 2 4

Develops the skill of taking dictation and of transcribing at the typewriter materials appropriate to the course of study, which includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 100 words per minute required for 5 minutes on new material.

T-BUS 207E—Dictation and Transcription 3 2 4

Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 110 words per minute required for 5 minutes on new material.

T-BUS 208E—Dictation and Transcription 3 2 4

Principally a speed building course, covering materials appropriate to the course of study, with emphasis as well as accuracy. Minimum dictation rate of 120 words per minute required for 5 minutes on new material.

Prerequisite: T-BUS 207.

T-BUS 214—Secretarial Procedures 3 2 4

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies office organization, and insurance claims.

T-BUS 229—Taxes 3 2 4

Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise, and inheritance.

Prerequisite: BUS 131.

T-BUS 232—Sales Development 3 0 3

A study of retail, wholesale and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for an execution of sales demonstrations required.

Prerequisite: None.

T-BUS 235—Business Management 3 0 3

Principles of business management including overview of major functions of management, such as planning, staffing, controlling, directing, and financing. Clarification of the decision-making function versus the operating function. Role of management in business-qualifications and requirements.

Prerequisite: None.

T-BUS 239—Marketing 3 0 3

A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing processes.

Prerequisite: None.

T-BUS 243—Advertising 3 2 4

The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals; product and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media.

Prerequisite: None.

T-BUS 271—Office Management 3 0 3

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems.

Prerequisite: None.

T-BUS 272—Principles of Supervision 3 0 3

Introduces the basic responsibilities and duties of the supervisor and his relationship to supervisors, subordinates, and associates. Emphasis on securing an effective work force and the role of the supervisor. Methods of supervision are stressed.

Prerequiite: None.

T-BUS 273—Elements of Retailing 3 0 3

This course is designed to help students understand retailing from the viewpoint of the owner or manager. Topics studied; organization of the retail firm; establishment of stores; customer needs; purchasing, pricing and financing; advertising and selling; planning and control.

T-BUS 274—Personnel Management 3 0 3

The techniques of supervising and co-ordinating the work of others. Among the items covered are employment interview techniques, training procedures, supervision of employees, delegating authority and responsibility, factors influencing employees' morale, job studies and descriptions, current policies on labor-management relations and labor legislation affecting business workers.

T-EDP 104—Introduction to Data Processing Systems 3 2 4

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detail study of particular computer problems. This course is a prerequisite for all programming courses.

Prerequisite: BUS 131.

ECO 201-202-203—Principles of Economics 3 0 3

A study of the present-day economic system; demand, supply, prices, and cost; wages, rent, interest, and profit; business cycles, money, banking, and the Federal Reserve System; international trade; and a comparison of Capitalism, Socialism, Communism, and Fascism. (3 credits each quarter.)

COURSES OF INSTRUCTION

(Drafting and Design; Electronics)

Course Numbering System:

Freshman-level courses are numbered 100 through 199 and sophomore courses from 200 through 299. Courses should be pursued in proper sequence with prerequisite courses taken as advised. On the same line, following the course title, the number of lecture and laboratory hours per week and the number of quarter credit hours earned.

DRAFTING AND DESIGN

T-DFT 101—Technical Drafting I 0 6* 2

The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced.

Prerequisite: None.

T-DFT 102—Technical Drafting II 0 6* 2

Application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions will be studied. Most important is the introduction of the graphical analysis of space problems. Problems of practical design elements shall be studied. Dimensioning practices for "details" and "working drawing," approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects.

Prerequisite: T-DFT 101.

T-DFT 103—Technical Drafting III 0 6* 2

Intersection and developments and their practical solutions. Where applicable, model solutions accompany the problems. The various techniques employed to produce and render isometric and oblique drawings, isometric, dimetric and trimetric projections, will be included.

Prerequisite: T-DFT 102.

T-DFT 201—Technical Drafting IV 2 6* 4

Applications and constructions of charts, graphs, and nomographs in engineering and technical data. Screw threads, springs, keys, rivets, piping, and welding sysmbols, methods of representing and specifying will be covered. Basic mechanisms of motion transfer, gears and cams, will be studied and drawn with emphasis on methods of specifying, calulating, dimensions, and delineating.

Prerequisite: T-DFT 103.

T-DFT 204—Descriptive Geometry 2 4 4

Graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems will be stressed with analytical verification where applicable. Visualization shall be stressed on every problem.

Prerequisite: T-DFT 102, T-MAT 102.

T-DFT 205—Design Drafting I 2 6* 4

Basic design is introduced in the study of motion transfer mechanisms as they relate to power trains. Principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings and simplified drafting practices constitute areas of study. Types and methods of specifying materials and workmanship are an integral part of the course.

Prerequisite: T-DFT 204, T-MAT 102, T-PHY 102.

T-DFT 206—Design Drafting II 2 6* 4

Research to solve a problem in design by consulting various manuals, periodicals, and through laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly and sub-assembly drawings, pictorial drawings, exploded pictorial assembly, patent drawings and specifications are required as a part of the problem.

Prerequisite: T-DFT 205.

T-DFT 211—Mechanisms 3 2 4

Mathematics and drafting room solutions of problems involving the principles of machine elements. Study of motion of linkages, velocities and acceleration of points within a link mechanism; layout methods for designing cams, belts, pulleys, gears and gear trains.

Prerequisites: T-DFT 201, and 204, T-MAT 103, T-PHY 106.

ELECTRICITY

T-ELC 101—Fundamentals of Electricity I 4 4-6 6

Elementary principles of electricity including: basic electric units, Ohms law, Kirchhoffs laws, network theorems, magnetics, basic electrical measuring instruments, inductance, capacitance, sine wave analysis, and non-resonant resistive, inductive and capacitive networks.

Prerequisite: None.

T-ELC 102—Fundamentals of Electricity II 4 4-6 6

Series and parallel resonant-circuit analysis, resonant, and non-resonant transformer analysis, basic diode power supply analysis, introduction to non-linear resistive control devices, and introduction to electro-mechanical devices.

Prerequisite: T-ELC 101.

ELECTRONICS

T-ELN 101—Electronic Instruments & Measurements 1 4-6 3

A study of basic electronic instruments, their theory of operation, function, tolerances, and calibration. Both service and laboratory instruments will be studied. Laboratory experience will provide application of each type instrument studied.

Prerequisite: T-ELC 102.

Corequisite: T-ELN 105.

T-ELN 105—Control Devices 5 4-6 7

A study in depth of the electrical characteristics of vacuum tubes and transistors. Basic parameters and applications of each type device to the three configurations of a three terminal two port system will be included.

Prerequisite: T-ELC 102.

Corequisite: T-ELN 101.

T-ELN 205—Applications of Vacuum Tubes and Transistors 5 4-6 7

Practical applications of vacuum tubes and transistors to basic audio amplifiers, radio frequency amplifiers, detectors, modulators and oscillators.

Prerequisite: T-ELN 105.

T-ELN 210—Semiconductor Circuit Analysis 5 2-3 6

A study in some depth of the analysis and design of transistor circuits. Network theorems and equivalent circuits are used extensively in evaluating total circuit performance. Device peculiarities and limitations pertinent to reliable operations are considered. H. Y. Z. and T. parameters are employed as well as single-flow graphs.

Prerequisite: T-ELN 105.

T-ELN 214—Wave Shaping and Pulse Circuits 2 2-3 3

Broadband amplifiers, magnetic amplifiers, multivibrators, wave shaping techniques, chopper amplifiers, clipper and clamper circuits.

Prerequisites: T-ELN 105, T-MAT 103.

T-ELN 215—Wave Shaping and Pulse Circuits 2 2-3 3

Pulse techniques, diode switches, gates, step-counter, restorers and other specific circuits with function as switches.

Prerequisite: T-ELN 214.

T-ELN 220—Electronic Systems 5 4-6 7

A block diagram course investigating numerous electronic systems. Modules or blocks of various circuit already studied are arranged in various manners to produce complex electronic systems. Systems will be explained and reduced to functions and then to block diagrams. AM, FM, and Single Sideband transmitters and receivers, multiplexing, TV transmitters and receivers, pulse-modulated systems, computers, telemetry, navigational systems, sonar and radar will be considered.

Corequisite: T-ELN 215.

ENGLISH

ENGL 80—Reading Improvement 5 0 0

Designed for students desiring to improve comprehension, speed and vocabulary. Diagnostic tests, reading films, accelerators and tachistoscope are used, along with how-to-study materials. Tuition charge: same as for three-credit course.

ENGL 101—Freshman English I 3 0 3

This course is designed to help the student enrich his knowledge of English grammar, punctuation, sentence and paragraph building, and the use of the dictionary. These mechanics of English will be applied to short themes as required.

Prerequisite: None.

ENGL 102—Freshman English II 3 0 3

This course is a continuation of College English I, with frequent themes required. Conferences with individual students are recommended. There will be an introduction to principal literary forms by means of selections from modern authors and periodicals.

Prerequisite: English 101.

ENGL 103—Freshman English III 3 0 3

This course emphasizes the development of good prose style and vocabulary development. Long themes, learning to use the dictionary, parallel reading, and a research paper will be required.

Prerequisite: English 102.

ENGL 205—Report Writing 3 0 3

The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum.

Prerequisite: English 102.

ENGL 206—Business Communications 3 0 3

Develops skills in techniques in writing business communications. Emphasis is placed on writing action-getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgements, remittances, and inquiry.

Prerequisite: English 102.

SPEECH 101—Fundamentals of Speech I 3 0 3

This course involves the study and application of the fundamentals of extemporaneous speaking. Consideration of the mechanics of speech is involved, with emphasis on oral reading as a means of improving voice and articulation. The development of proficiency in public speaking is encouraged through an introduction to the informative speech, the persuasive speech and group discussion. Students use audio aids in weekly laboratory sessions at the Communication Center.

Prerequisite: One quarter of Freshman English.

SPEECH 102—Speech II 3 0 3

A study of oral interpretation of literature including the ballad, lyric and narrative poetry, the article and short story; dramatic reading from Shakespeare, Bible, and other sources; and an introduction to the principles of argumentation and debate.

MATHEMATICS

T-MAT 101—Technical Mathematics I 5 0 5

The real number system is developed as an extension of natural numbers. Number systems of various bases are introduced. Fundamental algebraic operations, the rectangular coordinate system, as well as fundamental trigonometric concepts and operations are introduced. The application of these principles to practical problems is stressed.

Prerequisite: Satisfactory evidence that admission requirements have been met.

T-MAT 102—Technical Mathematics II 5 0 5

A continuation of T-MAT 101. Advanced algebraic and trigonometric topics including quadratics, logarithms, determinants, progressions, the binominal expansion, complex numbers, solution of oblique triangles and graphs of the trigonometric functions are studied in depth.

Prerequisite: T-MAT 101.

T-MAT 103—Technical Mathematics III 5 0 5

The fundamental concepts of analytical geometry, differential and intergral calculus are introduced. Topics included are graphic techniques, geometric and algebraic interpretation of the derivative, differentials, rate of change, the integral and basic integration techniques. Applications of these concepts to practical situations are stressed.

Prerequisite: T-MAT 102.

T-MAT 201—Technical Mathematics IV 5 0 5

A continuation of T-MAT 103. More advanced concepts of differentiation and integration are considered. Included are graphs and derivatives of the trigonometric functions, exponential and logarithmic differentiation and integration, advanced integration techniques, polar equations, parametric equations, and Fourier series.

Prerequisite: T-MAT 103.

MECHANICAL

T-MEC 101—Machine Processes I 0 6* 2

An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of measuring instruments, characteristics of metals and cutting tools. The student will become familiar with the lathe family of machine tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming.

Prerequisite: None.

T-MEC 102—Machine Processes II 0 6* 2

Advanced operations on lathe, drilling, boring and reaming machines. Milling machine theory and practice. Thorough study of the types of milling machines, cutters, jig and fixture devices, and the accessories used in a modern industrial plant. Safety in the operational shop is stressed.

Prerequisite: T-MEC 101.

T-MEC 205—Strength of Materials 3 2 4

Study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying and dynamic. Analyses of these stresses are made as applied to thin-walled cylinders and sphere, riveted and welded joints, beams, columns and machine components.

Prerequisites: T-PHY 106, T-MAT 103.

T-MEV 210—Physical Metallurgy 3 3* 4

Introductory course in metallurgy, a basic study of the properties of metals and alloys. Analysis of the structure of metals and alloys, atomic structure, nuclear structure, and nuclear reactions. Solid (crystalline) structures, methods of designating crystal planes; liquid and vapor phases; phase diagrams; and alloy systems.

Prerequisite: T-PHY 101.

T-MEC 211—Physical Metallurgy 3 3* 4

Properties of metals and alloys, the reactions of metals, diffusion, carburizing, metal bonding and homogenization; recrystallization and grain growth, age hardening, nitriding, internal oxidation; heat treatment of steel; laboratory experiments and demonstrations.

Prerequisite: T-MEC 210.

T-MEC 235—Hydraulics and Pneumatics 3 3* 4

The basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits. Basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators and reservoirs.

Prerequisite: T-PHY 102.

PHYSICS

T-PHY 101—Physics: Properties of Matter 3 2 4

A fundamental course covering several basic principles of physics. The divisions included are solids and their characteristics, liquids at rest and in motion, gas laws and applications. Laboratory experiments and specialized problems dealing with these topics are part of this course.

T-PHY 102—Physics: Work, Energy, Power 3 2 4

The major areas covered in this course are work, energy, and power. Instruction includes such topics as statics, forces, center of gravity, and dynamics. Units of measurement and their applications are a vital part of this course. A practical approach is used in teaching students the use of essential mathematical formulas.

Prerequisites: T-PHY 101, T-MAT 101.

T-PHY 103—Physics: Electricity 3 2 4

Basic Theories of electricity, types of electricity, methods of production, and transmission and transforming of electricity. Electron theory, electricity by chemical action, electricity by friction, electricity by magnetism, induction voltage, amperage, resistance horsepower, wattage, and transformers are major parts of the course.

Prerequisites: T-PHY 101, T-MAT 101.

T-PHY 104—Physics: Light and Sound 3 2 4

A survey of the concepts involving wave motion leads to a study of sound, its generation, transmission and detection. The principles of wave motion also serve as an introduction to a study of light, illumination and the principles involved in optical instruments. Application is stressed throughout.

Prerequisites: T-MAT 101, T-PHY 101.

T-PHY 106—Applied Mechanics 5 0 5

Concepts and principles of statics and dynamics. Parallel concurrent and noncurrent force systems in coplanar and noncoplanar situation. Concepts of centroids and center of gravity, moments of inertia, fundamentals of kinetics, and kinematics of velocity and motion.

Prerequisites: T-MAT 103, T-PHY 102.

VOCATIONAL DIVISION

The recent growth of industry, with its rapid technological advances has created a greater need for skilled craftsmen. These craftsmen must acquire the technical knowledge of the occupation and be able to perform the necessary manipulative skills to successfully meet the increasing demands required of industry.

The objectives of the vocational programs at Surry Community College are to prepare individuals for initial employment in recognized skilled occupations, to re-train for entering new occupations, to advance in a given occupation by updating or upgrading of skills and knowledge, to develop an understanding of the American free enterprise system, and to develop an interest in the betterment of our society.

Vocational programs require one full year of participation for students on a full-time basis. Courses will be available during the day and during the evening for students desiring to enroll on a part-time basis.

The vocational programs are designed to prepare the graduate to enter and make progress in a skilled occupation. Up-to-date instructional equipment is used in classroom, laboratory, and shop activities. Included in the programs of study is instruction in related and applied general education subjects with a concentration of study in technical subjects and the development of manipulative skills.

PROGRAMS OF STUDY

The diploma is granted upon the successful completion of one of the following one-year programs:

Power Mechanics—Automotive
Welding
Carpentry
Electrical Installation and Maintenance
Licensed Practical Nursing

Admission to a Program

These programs are open to any high school graduate or person 18 years of age or over who shows promise of successfully completing the program. Students with deficiencies in subjects basic to the program may be required to complete supplementary studies at the College prior to entering the program on a full-time basis.

Minimum Admission Requirements

Requirements for admission of a candidate to the regular one-year vocational program are: The candidate:

1. Must be a high school graduate or have a State approved equivalent education.
2. Must have high school credit for one unit in general mathematics. Competence may be determined by appropriate tests. A student with mathematics deficiencies may be admitted only when there is strong indication of probable success.
3. Must submit the transcripts of high school and post-high school education.
4. Must demonstrate aptitude for the specific vocational training as determined by standardized tests. These tests will aid in student selection, placement, and guidance. Institutional guidance and counseling will be available to the student through-out his education.
5. Must be in acceptable physical and mental health. A medical examination will be required.
6. Must have interview with a designated College representative for discussing enrollment plans and career goals.

Estimated Expenses for Vocational Program Students:

Tuition Per Quarter

Full-time Students	
Residents of North Carolina	32.00
Non-Residents of North Carolina	80.00
Part-time Students	
Residents of North Carolina	$2.50/credit hour
Non-Residents of North Carolina	$6.25/credit hour

Other Fees (see all college fee schedule)

Books and Supplies

Estimated annual expenditure for full-time students	60.00

Tools

Automobile Body Repair Tools	60.00
Automobile Mechanic Tools	110.00
Drafting Instruments	35.00
Machinists Tools	60.00

Total estimated expenses for tuition, books, tools and supplies per year:

Residents of North Carolina	$205 to $280
Non-Residents of North Carolina	$400 to $475

Requirements for the Diploma

Candidates for the diploma must successfully complete at least the following general education requirements, or their equivalent, and all other requirements in the curriculum in which he is enrolled. The student's grade point average must be 2.0 ("C" grade or better) on all work attempted at Surry Community College. The student must be enrolled and complete the last 15 quarter hours or more of work at Surry Community College, and a minimum of thirty quarter hours of work must be completed at this institution.

The student must complete the following minimum general education requirements in addition to the trade-related courses: Communicative skills (5 quarter hours), mathematics (5 quarter hours), and social sciences (3 quarter hours).

POWER MECHANICS—AUTOMOTIVE

This Curriculum provides a training program for developing the basic knowledge and skills needed to inspect diagnose, repair or adjust automotive vehicles. Manual skills are developed in practical shop work. Thorough understanding of the operating principles involved in the modern automobile comes in class assignments, discussion, and shop practice.

Complexity in automotive vehicles increases each year because of scientific discovery and new engineering. These changes are reflected not only in passenger vehicles, but also in trucks, buses and a variety of gasoline-powered equipment. This curriculum provides a basis for the student to compare and adapt to new techniques for servicing and repair as vehicles are changed year by year.

Automobile mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas, they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the cause of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition. They use shop manuals and other technical publications.

Automotive mechanics in smaller shops usually are general mechanics qualified to perform a variety of repair jobs. A large number of automobile mechanics specialize in particular types of repair work. For example, some may specialize in repairing only power steering and power brakes, or automatic transmissions. Usually such specialists have an all-round knowledge of automotive repair and may occasionally be called upon to do other types of work.

POWER MECHANICS—AUTOMOTIVE

First Quarter

PME	1101	Internal Combustion Engines	3	12	7
MAT	1101	Fundamentals of Mathematics	5	0	5
ENG	1101	Reading Improvement	2	0	2
PHY	1101	Applied Science I	3	2	4
			13	14	18

Second Quarter

PME	1102	Engine Electrical & Fuel Systems	5	12	9
ENG	1102	Communication Skills	3	0	3
DFT	1101	Schematics and Diagrams. Power Mechanics	0	3	1
PHY	1102	Applied Science II	3	2	4
			11	17	17

Third Quarter

AUT	1123	Automotive Chassis and Suspensions Systems	3	9	6
AUT	1121	Braking Systems	3	3	4
PSY	1101	Human Relations	3	0	3
AHR	1101	Automotive Air Conditioning	2	3	3
WLD	1101	Basic Gas Welding	0	3	1
			11	18	17

Fourth Quarter

AUT	1124	Automotive Power Train Systems	3	9	6
AUT	1125	Automotive Servicing	3	9	6
BUS	1103	Small Business Operations	3	0	3
			9	18	15

WELDING

This curriclum was developed to fill the tremendous need for welders in North Carolina. The recently completed Manpower Survey shows quite clearly that many welders will be needed annually to fill present and projected vacancies in the State.

The content of this curriculum is designed to give students sound understanding of the principles, methods, techniques and skills essential for successful employment in the welding field and metals industry.

The field of welding offers a person prestige, security and a future of continuous employment with steady advancement. It offers employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, railroads, construction, pipe fitting, production shop, job shop and many others.

Welders join metals by applying intense heat, and sometimes pressure, to melt the edges to form a permanent bond. Closely related to welding is "oxygen cutting." Of the more than 35 different ways of welding metals, arc, gas, and resistance welding are the three most important.

The principal duty of the welder using manual techniques is to control the melting by directing the heat from either an electric arc or gas welding torch, and to add filler metal where necessary to complete the joint. He should possess a great deal of manipulative skill with a knowledge of jigs, welding symbols, mathematics, basic metallurgy, and blueprint reading.

WELDING

First Quarter

WLD	1120	Oxyacetylene Welding & Cutting	3	12	7
MAT	1101	Fundamentals of Mathematics	5	0	5
DFT	1104	Blueprint Reading: Mechanical	0	3	1
PHY	1101	Applied Science I	3	2	4
ENG	1101	Reading Improvement	2	0	2
			13	17	19

Second Quarter

WLD	1121	Arc Welding	3	12	7
MAT	1103	Geometry	3	0	3
DFT	1117	Blueprint Reading: Welding	0	3	1
PHY	1102	Applied Science II	3	2	4
ENG	1102	Communication Skills	3	0	3
			12	17	18

Third Quarter

WLD	1124	Pipe Welding	3	12	7
WLD	1123	Inert Gas Welding	1	3	2
WLD	1112	Mechanical Testing and Inspection	1	3	2
DFT	1118	Pattern Development and Sketching	0	3	1
PSY	1101	Human Relations	3	0	3
			8	21	15

Fourth Quarter

WLD	1122	Commercial and Industrial Practices	3	9	6
WLD	1125	Certification Practices	3	6	5
MEC	1112	Machine Shop Processes	0	6	2
BUS	1105	Industrial Organizations	3	0	3
			9	21	16

BUILDING CONSTRUCTION TRADES

CARPENTRY

Carpentry is one of the basic trades in the construction field. Carpenters construct, erect, install, and repair structures of wood, plywood, and wallboard, using hand and powertools. The work must conform to local building codes for both residential and commercial structures.

This curriculum in carpentry is designed to train the individual to enter the trade with a background in both shop skills and related information. He must have a knowledge of mathematics, blueprint reading, methods of construction and a thorough knowledge of building materials.

The modern carpenter will work on new construction, maintenance, and repair of many types of structures, both residential and commercial. He should have an understanding of building materials, concrete form construction, rough framing, roof and stair construction, the application of interior and exterior trim, and the installation of cabinets and fixtures.

Most carpenters are employed by contractors in the building construction fields. When specializing in a particular phase of carpentry, the job is designated according to the specialty as lay-out carpenter, framing carpenter, concrete form carpenter, scaffolding carpenter, acoustical and insulating carpenter, and finish carpenter.

The carpenter constructs, erects, installs and repairs structures and fixtures of wood, plywood, wallboard and other materials, using carpenters handtools and powertools to conform to local building codes. He is required to use blueprints, sketches or building plans for information pertaining to type of material, dimensions, layout and design of structure, and method of construction.

CARPENTRY

First Quarter

ENG 1101	Reading Improvement	2	0	2
MAT 1101	Fundamentals of Mathematics	5	0	5
DFT 1110	Blueprint Reading Building Trades	0	3	1
CAR 1101	Carpentry	3	15	8
		10	18	16

Second Quarter

ENG 1102	Communication Skills	3	0	3
MAT 1112	Building Trades Mathematics	3	0	3
DFT 1111	Blueprint Reading and Sketching	0	3	1
CAR 1102	Carpentry: Millwork and Cabinetmaking	3	15	8
		9	18	15

Third Quarter

PSY 1101	Human Relations	3	0	3
CAR 1113	Carpentry: Estimating	3	3	4
CAR 1103	Carpentry: Framing	3	15	8
		9	18	15

Fourth Quarter

CAR 1114	Building Codes	3	0	3
BUS 1103	Small Business Operations	3	0	3
CAR 1104	Carpentry: Finishing	3	18	9
		9	18	15

BUILDING CONSTRUCTION TRADES

ELECTRICAL INSTALLATION & MAINTENANCE

The rapid expansion of the national economy and the increasing development of new electrical products is providing a growing need for qualified people to install and maintain electrical equipment. By mid-1960, more than 350,000 were employed as either construction electricians or maintenance electricians. Between 5,000 and 10,000 additional tradesman are required each year to replace those leaving the industry. It is expected that the total requirements for electrical tradesmen will reach 500,000 by 1966 and 700,000 by 1970. The majority of the electrical tradesmen today are trained through apprenticeship or on-the-job training programs.

This curriclum guide will provide a training program in the basic knowledge, fundamentals, and practices involved in the electrical trades. A large portion of the program is devoted to laboratory and shop instruction which is designed to give the student practical knowledge and application experience in the fundamentals taught in class.

The graduate of the electrical trades program will be qualified to enter an electrical trade as an on-the-job trainee or apprentice, where he will assist in the planning, layout, installation, check out, and maintenance of systems in residential, commercial, or industrial plants. He will have an understanding of the fundamentals of the National Electrical Code regulations as related to wiring installations, electrical circuits, and the measurements of voltage, current, power, and power factor of single and polyphase alternating circuits. He will have a basic knowledge of motor and motor control systems; industrial electronic control system; business procedures, organization, and practices; communicative; skills; and the necessary background to be able to advance through experience and additional training through up-grading courses offered in the center.

ELECTRICAL INSTALLATION & MAINTENANCE

First Quarter

ELC	1112	Direct and Alternating Current	5	12	9
ENG	1101	Reading Improvement	2	0	2
MAT	1115	Electrical Math	5	0	5
PHY	1101	Applied Science I	3	2	4
			15	14	20

Second Quarter

ELC	1113	Alternating Current and Direct Current Machines and Controls	5	12	9
DFT	1110	Blueprint Reading: Building Trades	0	3	1
ENG	1102	Communication Skills	3	0	3
PHY	1102	Applied Science II	3	2	4
			11	17	17

Third Quarter

ELC	1124	Residential Wiring	5	9	8
ELN	1118	Industrial Electronics	3	6	5
PSY	1101	Human Relations	3	0	3
DFT	1113	Blueprint Reading: Electrical	0	3	1
			11	18	17

Fourth Quarter

ELC	1125	Commercial and Industrial Wiring	5	12	9
ELN	1119	Industrial Electronics	3	6	5
BUS	1103	Small Business Operations	3	0	3
			11	18	17

PRACTICAL NURSING EDUCATION

The practical nurse is prepared to function in a variety of situations: hospitals of all types, nursing homes, clinics, doctors' and dentists' offices and, in some localities, public health facilities. In all situations the practical nurse functions under supervision of a registered nurse and/or licensed physician. This supervision may be minimal in situations where the patient's condition is stable and not complex; or it may consist of continuous direction in situations requiring the knowledge and skills of the registered nurse or physician. In the latter situation, the practical nurse may function in an assisting role in order to avoid assuming responsibility beyond that for which the one-year program can prepare the individual.

Job requirements for the Licensed Practical Nurse include suitable personal characteristics, ability to adapt knowledge and understandings of nursing principles to a variety of situations, technical skills for performance of bedside nursing, appreciation for differences of people and for the worth of every individual, a desire to serve and help others, and readiness to conform to the requirements of nursing ethics and hospital policies.

Surry Community College offers a program for qualified applicants interested in becoming licensed practical nurses.

The curriculum is planned for one year. It incorporates courses in the biological and social sciences, and nursing courses, with selected experience in nursing in area hospitals.

The curriculum is planned to prepare both men and women for careers as practical nurses.

Students are admitted to the practical nursing program following eveluation of pre-entrance test, high school transcript, equivalency, character reference, reports of medical and dental examination and a personal interview.

Successful completion of all courses in a quarter is required before students will enroll for the next quarter.

Graduates of this program are prepared to function as practical nurses under the supervision of a registered nurse and/or licensed physician. The graduate is eligible to write the State Board Test Pool Licensing Examination for Registration as a practical nurse.

PRACTICAL NURSING EDUCATION

		Lect	Lab or Clinic*	Credit
First Quarter				
PNE 1111	Fundamentals of Practical Nursing	5	9	8
PNE 1112	Anatomy and Physiology	5	0	5
PNE 1113	Growth and Development	3	0	3
MAT 1119	Math for Practical Nurses	2	0	2
PNE 1114	Nursing Ethics	2	0	2
		17	9	20
Second Quarter				
PNE 1121	Medical and Surgical Nursing I	5	15	10
PNE 1122	Pharmacology I	3	3	4
PNE 1123	Nutrition	3	0	3
PNE 1124	Introduction to Maternal Nursing and Child Care	3	0	3
		14	18	20
Third Quarter				
PNE 1131	Medical and Surgical Nursing II	5	24	13
PNE 1132	Nursing of Children	2	0	2
PNE 1133	Maternity Nursing	2	0	2
		9	24	17
Fourth Quarter				
PNE 1141	Medical and Surgical Nursing III	5	24	13
PNE 1142	Mental Health	2	0	2
ENG 1102	Effective Communications	3	0	3
		10	24	18

* Clinical hours assigned will depend on clinical rotation schedule.

VOCATIONAL DIVISION

COURSES OF INSTRUCTION

POWER MECHANICS

PME 1101—Internal Combustion Engine 3 12 7

Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cam and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing.

Prerequisites: None.

PME 1102—Engine Electrical and Fuel Systems 5 12 9

A thorough study of the electrical and fuel systems of the automobile. Battery cranking mechanism, generator, ignition, accessories and wiring; fuel pumps, carburetors, and fuel injectors. Characteristics of fuels, types of fuel systems, special tools, and testing equipment for the fuel and electrical system.

Prerequisite: PME 1101.

AUTOMOTIVE

AUT 1121—Braking Systems 3 3 4

A complete study of various braking systems employed on automobiles and light weight trucks. Emphasis is placed on how they operate, proper adjustment, and repair.

Prerequisite: PHY 1102.

AUT 1123—Automotive Chassis and Suspension Systems 3 9 6

Principles and functions of the components of automotive chasis. Practical job instruction in adjusting and repairing of suspension, and steering systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, and front end and alignment.

Prerequisite: PME 1102.

AUT 1124—Automotive Power Train Systems 3 9 6

Principles and functions of automotive power train systems: clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair.

Prerequisites: PHY 1102, AUT 1123.

AUT 1125—Automotive Servicing 3 9 6

Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Troubleshooting of automotive systems, providing a full range of experiences in testing, adjusting, repairing and replacing.

Prerequisites: AUT 1123, AUT 1121, AHR 1101.

WELDING

WLD 1101—Basic Gas Welding 0 3 1

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding; bronze welding, silver-soldering, and flame-cutting methods applicable to mechanical repair work.

Prerequisite: None.

WLD 1112—Mechanical Testing and Inspection 1 3 2

The standard methods for mechanical testing of welds. The student is introduced to the various types of tests and testing procedures and performs the details of the test which will give adequate information as to the quality of the weld. Types of tests to be covered are: bend, destructive, free-bend, guided-bend, nick-tear, notched-bend, tee-bend, nondestructive, V-notch, Charpy impact, et.

Prerequisites: WLD 1120, WLD 1121.

WLD 1120—Oxacetylene Welding and Cutting 3 12 7

Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, assembly of units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead position, brazing, hard and soft soldering. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. Students perform mechanical testing and inspection to determine quality of the welds.

Prerequisite: None.

WLD 1121—Arc Welding 3 12 7

The operation of AC transformers and DC motor generator arc welding sets. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weaknesses in welding. Safety procedures are emphasized throughout the course in the use of tools and equipment.

Prerequisite: None.

WLD 1122—Commercial and Industrial Practices 3 9 6

Designed to build skills through practices in simulated industrial processes and techniques: sketching and laying out on paper the size and shape description, listing the procedure steps necessary to build the product, and then actually following these directions to build the product. Emphasis is placed on maintenance, repairing worn or broken parts by special welding applications, field welding and nondestructive test and inspection.

Prerequisites: WLD 1120, WLD 1121.

WLD 1123—Inert Gas Welding 1 3 2

Introduction and practical operations in the use of inert-gas-shield arc welding. A study will be made of the equipment, operation, safety and practice in the various positions. A thorough study of such topics as: principles of operation, shielding gases, filler rods, process variations and applications, manual and automatic welding.

Prerequisites: WLD 1120, WLD 1121.

WLD 1124—Pipe Welding 3 12 7

Designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code.

Prerequisite: WLD 1121.

WLD 1125—Certification Practices 3 6 5

This course involves practice in welding the various materials to meet certification standards. The student uses various tests including the guided bend and the tensile strength tests to check the quality of his work. Emphasis is placed on attaining skill in producing quality welds.

Prerequisites: WLD 1120, WLD 1121, WLD 1123, WLD 1124.

CARPENTRY

CAR 1101—Carpentry 3 15 8

A brief history of carpentry and present trends of the construction industry. The course will involve operation care and safe use of carpenters hand tools and power tools in cutting, shaping and joining construction materials used by the carpenter. Major topics of study will include theoretical and practical applications involving: materials and methods of construction, building layout, preparation of site, footings and foundation wall construction including form construction and erection.

Prerequisite: None.

CAR 1102—Carpentry: Millwork and Cabinetmaking 3 15 8

Cabinetmaking and millwork as performed by the general carpenter for building construction. Use of shop tools and equipment will be emphasized in learning methods of construction of millwork and cabinetry. Practical applications will include measuring, layout and construction of: base and wall cabinets, built-in desk, door and window frames, stairs, and interior and exterior cornice and trim. Materials and finishes will also be studied.

Prerequisite: CAR 1101, DFT 1110.

CAR 1103—Carpentry: Framing 3 15 8

Instruction is given in the principles and practices of frame construction beginning with the foundation sills and including: floor joist, subfloor, wall studs, ceiling joist, rafters, bridging, bracing, sheathing and interior wall partition. Roof construction includes the layout and construction methods of common types of roofs using standard rafter construction, truss construction, and post and beam construction. Application and selection of sheathing and roofing is included. Consideration is given to the coordination of carpentry work with installation of the mechanical equipment such as: electrical, air conditioning, heating, and plumbing.

Prerequisites: CAR 1101, DFT 1111.

CAR 1104—Carpentry: Finishing 3 18 9

Exterior and interior trim and finish carpentry will complete the general carpentry program. Included will be materials and methods used in finishing carpentry such as: exterior cornice, door and window trim; interior flooring, door and window facing, moldings, and cornice construction; installation of hardware; and installation of built-in equipment and cabinets.

Prerequisites: CAR 1103, DFT 1111.

CAR 1113—Carpentry: Estimating 3 3 4

This is a practical course in quantity "take off" from prints of jobs performed by the carpenter. Figuring the quantities of materials needed and costs of building various components and structures.

Prerequsites: DFT 1111, MAT 1112.

CAR 1114—Building Codes 3 0 3

A study is made of building codes and the minimum requirements for local, county and state construction regulations. This involves safety, sanitation, mechanical equipment and materials. Also, a review will be made of the minimum property requirements of the Federal Housing Administration and the North Carolina State Code.

Prerequisite: CAR 1103.

Corequisite: CAR 1104.

DRAFTING AND BLUEPRINT READING

DFT 1101—Schematics and Diagrams: Power Mechanics 0 3 1

Interpretation and reading of blueprints. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.

Prerequisite: None.

DFT 1104—Blueprint Reading: Mechanical 0 3 1

Interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.

Prerequisite: None.

DFT 1110—Blueprint Reading: Building Trades 0 3 1

Principles of interpreting blueprints and trade specifications common to the building trades. Development of proficiency in making three view and pictorial sketches.

Prerequisite: None.

DFT 1111—Blueprint Reading and Sketching 0 3 1

Principles of interpreting blueprints and specifications common to the building trades. Practice in reading details for grades, foundations, floor plans, elevations, walls, doors and windows, and roofs of buildings. Development of proficiency in making three view and pictorial sketches.

Prerequisite: DFT 1110.

DFT 1112—Blueprint Reading and Sketching 0 3 1

Designed to develop abilities in reading complex drawings in the masonry field. Blueprints of residential and commercial buildings will be studied with emphasis on the plot plan, floor plan, basement and/or foundation plan, walls and various detailed drawings of masonry work.

Prerequisite: DFT 1111.

DFT 1113—Blueprint Reading: Electrical 0 3 1

Interpretation of schematics, diagrams and blueprints applicable to electrical installations with emphasis on electrical plans for domestic and commercial buildings. Sketching schematics, diagrams, and electrical plans for electrical installations using appropriate symbols and notes according to the applicable codes will be a part of this course.

Prerequisite: DFT 1110.

DFT 1115—Blueprint Reading: Plumbing Trades 0 3 1

Sketching diagrams and schematics, and interpretation of blueprints applicable to the plumbing trades. Emphasis will be on plumbing plans for domestic and commercial buildings. Piping symbols, schematics, diagrams and notes will be studied in detail. Applicable building and plumbing codes will be used for reference.

Prerequisite: DFT 1110.

DFT 1116—Blueprint Reading: Air Conditioning 1 3 2

A specialized course in drafting for the heating, air conditioning and refrigeration student. Emphasis will be placed on reading of blueprints that are common to the trade; blueprints of mechanical components, assembly drawings, wiring diagrams and schematics, floor plans, heating system plans including duct and equipment layout plans, and shop sketches. The student will make tracings of floor plans and layout air conditioning systems.

Prerequisite: DFT 1122.

DFT 1117—Blueprint Reading: Welding 0 3 1

A thorough study of trade drawing in which welding procedures are indicated. Interpretation, use and application of welding symbols, abbreviations, and specifications.

Prerequisite: DFT 1104.

DFT 1118—Pattern Development and Sketching 0 3 1

Continued study of welding symbols; methods used in layout of sheet steel; sketching of projects, jigs and holding devices involved in welding. Special emphasis is placed on developing pipe and angle layout by the use of patterns and templates.

Prerequisite: None.

ELECTRICITY AND ELECTRONICS

ELC 1102—Applied Electricity 2 3 3

The use and care of test instruments and equipment used in servicing electrical apparatus for air conditioning and refrigeration installation. Electrical principles and procedures for trouble-shooting of the various electrical devices used in air conditioning, heating, and refrigeration equipment. Included will be transformers, various types of motors and starting devices, switches, electrical heating devices and wiring.

Prerequisite: PHY 1101.

ELC 1112—Direct and Alternating Current 5 12 9

A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchhoff's Law. A study of the sources of direct current voltage potentials. Fundamental concepts of alternating current flow, reactance, impedance, phase angle, power, and resonance. Analysis of alternating current circuits.

Prerequisite: None.

ELC 1113—Alternating Current and Direct Current Machines and Controls 5 12 9

Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis. The basic concepts of AC and DC machines and simple system controls. An introduction to the type control used in small appliances such as: thermostats, times, or sequencing switches.

Prerequisites: ELC 1112, MAT 1115.

ELC 1124—Residential Wiring 5 9 8

Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications such as: services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, National Electrical Code regulations in actual building mockups.

Prerequisites: ELC 1113, DFT 1110.

ELC 1125—Commercial and Industrial Wiring 5 12 9

Layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation, and installation of simple systems.

Prerequisites: ELN 1118, ELC 1124.

ELN 1118—Industrial Electronics 3 6 5

Basic theory, operating characteristics, and application of vacuum tubes such as: diodes, triodes, tetrodes, pentodes, and gaseous control tubes. An introduction to amplifiers using triodes, power supplies using diodes, and other basic applications.

Prerequisite: ELC 1113.

ELN 1119—Industrial Electronics 3 6 5

Basic industrial electronic eystems such as: motor controls, alarm systems, heating systems and controls, magnetic amplifier controls, welding control systems using thyratron tubes, and other basic types of systems commonly found in most industries.

Prerequisite: ELN 1118.

MECHANICAL

MEC 1112—Machine Shop Processes 0 6 2

To acquaint the student with the procedures of layout work and the correct use of hand and machine tools. Experience in the basic fundamentals of drill press and lathe operations; hand grinding of drill bits and lathe tools; set-up work applied to the trade.

Prerequisite: None.

MEC 1120—Duct Construction and Maintenance 3 6 5

Study of various duct materials including sheet steel, aluminum, and fiber glass. Safety, sheet metal hand tools, cutting and shaping machines, fasteners and fabrication practices, layout methods, and development of duct systems. The student will service various duct systems and perform on the site repairs including ducts made of fiber glass. A study is made of duct fittings, dampers and regulators, diffusers, heater and air washers, fans, insulation and ventilating hoods.

Prerequisites: DFT 1116, AHR 1123.

Corequisite: AHR 1126.

MATHEMATICS

MAT 1101—Fundamentals of Mathematics 5 0 5

Practical number theory. Analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.

Prerequisite: None.

MAT 1102—Algebra 5 0 5

Basic concepts and operations of algebra: historical background of our base-10 number system; algebraic operations: addition, subtraction, mulitplication and division; fraction, letter representation, grouping, factoring, ratio and proportions, variation; graphical and algebraic solution of first degree equations; solution of simultaneous equations by: addition and subtraction, substitution, graphing, exponents, logarithms, tables and interpolation.

Prerequisite: None.

MAT 1103—Geometry 3 0 3

Fundamental properties and definitions; plane and solid geometric figures, selected general theorems, geometric construction of lines, angles and plane figures. Dihedral angles, areas of plane figures, volumes of solids. Geometric principles are applied to shop operations.

Prerequisite: None.

MAT 1112—Building Trades Mathematics 3 0 3

Practical problems dealing with volumes, weights, ratios, mensuration, and basic estimating practices for building materials.

Prerequisite: MAT 1101.

MAT 1115—Electrical Mathematics 5 0 5

A study of fundamental concepts of algebra; basic operations of addition, subtraction, multiplication, and division; solution of first order equations, use of letters and signs, grouping, factoring, exponents, ratios, and proportions; solution of equations, algebraically and graphically; a study of logarithms and use of tables; an introduction to trigonometric functions and their application to right angles; and a study of vectors for use in alternating current.

Prerequisite: None.

PHYSICS

PHY 1101—Applied Science 3 2 4

An introduction to physical principles and their application in industry. Topics in this course include measurement; properties of solids, liquids, and gases; basic electrical principles.

Prerequisite: None.

PHY 1102—Applied Science 3 2 4

The second in a series of two courses of applied physical principles. Topics introduced in this course are heat and thermometry, and principles of force, motion, work, energy, and power.

Prerequisite: PHY 1101.

BUSINESS

BUS 1103—Small Business Operations 3 0 3

An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations.

Prerequisite: None.

BUS 1105—Industrial Organizations 3 0 3

Methods, techniques, and practices of modern management in planning, organizing and controlling operations of a manufacturing concern. Introduction to the competitive system and the factors constituting product cost.

Prerequisite: None.

ENGLISH

ENG 1101—Reading Improvement 2 0 2

Designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition and to train for comprehension in larger units.

Prerequisite: None.

ENG 1102—Communication Skills 3 0 3

Designed to promote effective communication through correct language usage in speaking and writing.

Prerequisite: ENG 1101.

PSYCHOLOGY

PSY 1101—Human Relations 3 0 3

A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

Prerequisite: None.

PHOTOGRAPHY

PHOTO 1101—Photography 2 2 3

Principles of photography; construction, maintenance and use of miniature, press and view cameras; developing film; printing; slide making; color photography.

PRACTICAL NURSING

PNE 1111—Fundamentals of Practical Nursing 5 9 8

Beginning knowledge of principles basic to nursing practice. Body mechanics for nurse and patient. Sterilization techniques and disinfection methods. Principles of medical and surgical asepsis. Use of hospital equipment. Techniques in daily hygienic patient care. Laboratory practice in simple skills and hygienic care of patients.

PNE 1112—Anatomy and Physiology 5 0 5

A thorough study of the general plan of the body and the nine systems: nervous, endocrine, skeletal, muscular, circulatory, digestive, respiratory, urinary, male and female reproductive system. Designed for understanding of how the body controls its functions, how the body stands erect and moves, how the body distributes food and oxygen and removes waste, how the body provides for survival.

PNE 1113—Growth and Development 3 0 3

Designed to show the patient as a member of a family whose life is altered by illness. Normal development from birth to old age. Effects of environment on growth and development; hospitalization of the young child, school-age adolescent. Physical changes with age. Mental and personality changes of the elderly. Community responsibilities and resources for young and old.

MAT 1119—Math for Practical Nurses 2 0 2

This course covers basic arthmetic procedures: addition, subtraction, multiplication, division, fractions, percentages, ratios and proportions. A study of metric and apothecary systems of weights and measures is also included, along with Fahrenheit and centigrade scales, solutions and dosages.

PNE 1114—Nursing Ethics 2 0 2

This course is designed to help the student to acquire appropriate knowledge of ethics to enable her to work and communicate with the doctor, professional nurse, patient and allied hospital employees. It is also designed to interest the student in community affairs and to give her insight into the moral and legal aspects of nursing. Emphasis is placed on nursing activities and organizations.

PNE 1121—Medical and Surgical Nursing I 5 15 10

Planned to give beginning understanding the nursing care of common problems caused by illness. Nurse-patient relationships. Fundamental processes of illness and nursing care. Physiology, reactions and nursing care of pain. Diagnostic tests. The nursing needs of the cancer patient. Anesthetic agents and the uses for them. Preoperative and postoperative nursing care. Rehabilitation. Modification of diet for disease conditions.

PNE 1122—Pharmacology 3 3 4

This course is designed to give the practical nurse student a knowledge of drugs, the dangers involved in handling, laws regarding the use of drugs, side effects and skills in administering drugs intelligently and safely.

PNE 1123—Nutrition 3 0 3

Designed to give knowledge of the basic principles of nutrition for nurse and patient. Functions and sources of nutrients. The mechanics of digestion, absorption and metabolism of nutrients. Principles of meal planning. Nutritional requirements for all age groups modified by religious, cultural, social, psychological.

PNE 1124—Introduction to Maternal Nursing and Child Care 3 0 3

This course is preparatory to PNE 1132, Nursing of Children, and PNE 1133, Maternity Nursing, in the third quarter. Policies and procedures of the affiliating hospital will be included. The student is given an opportunity to care for the pediatric patient in the clincial portion of the hospital or in a local pediatrician's office.

PNE 1131—Medical and Surgical Nursing II 5 24 13

Designed to develop knowledge of common disorders of body systems, the nursing care, socio-psychological implications. Includes disorders of the cardiovascular, gastrointestinal, respiratory and integumentary systems. Disorders of eye, ear, nose and throat.

PNE 1132—Nursing of Children 2 0 2

Understanding of the scope and aims of modern nursing of children. Physical differences in the child from the adult. Methods of answering the needs of the hospitalized child and his parents. Common disorders of children and their implications for nursing care.

PNE 1133 Maternity Nursing 2 0 2

Presentation of modern aspects of maternity nursing with emphasis on normal obstetrics. Detailed presentation of material on nursing care during antepartum, labor and postpartum periods. Care of the newborn baby and methods of teaching new mothers. Emphasis is to provide better and safer care for the mother and her baby.

PNE 1141 Medical and Surgical Nursing III 5 24 13

Continuation of study of disorders of the body systems. Includes musculoskeletal, endocrine and nervous systems. Urological disorders and nursing care. First aid.

PNE 1142 Mental Health 2 0 2

An introduction of mental, emotional and physical reactions caused by illness and hospitalization. Common terminology associated with the field of mental health is included.

ADULT EDUCATION AND EXTENSION DIVISION

Surry Community College is committed to the continuing education of all the citizens in its area of service. To fulfill this commitment, the college offers a variety of courses, institutes, conferences, clinics, forums, demonstrations, workshops and exhibits designed to meet adult educational needs and interests.

Through the Adult Education and Extension Division students find opportunities to retrain and update themselves in employment, develop leadership and civic responsibility, expand knowledge in general education, and develop creativity in the fine arts.

Adult Education and Extension Programs are offered when there is community need and interest. Some courses and services, because of great demand, are offered on a regular, continuing basis. Other courses and services may be initiated by requests from individuals and groups. Surry Community College cooperates with schools, libraries, colleges, health and welfare groups, civic clubs, community clubs, law enforcement agencies, fire service groups, and business and industrial groups to provide educational service for greater numbers of people.

CLASS LOCATIONS

Many adult education courses and services are provided on the College campus at Dobson. Other courses and services are provided in extension centers in the various communities of Surry and Yadkin Counties. New classes may be formed whenever a sufficient number of persons show interest in a particular area of study.

ADMISSION AND REGISTRATION

Any person eighteen years of age or older may be admitted to an adult education class. In extenuating circumstances and upon the approval of the appropriate public school official, a person under eighteen years of age may be admitted to an adult education class.

Prior to the beginning of each quarter, a course schedule is made available to potential students.

Courses which begin between quarters are announced through local news media. Adults are encouraged to contact the College and pre-register prior to the beginning of each course. However, adults may register at the first class session if unable to pre-register.

FEES

Fees vary with the type of educatonal program provided. Some programs such as adult basic education are supported primarily from state and federal funds and are free of student cost. Other programs such as business education are partially self-supporting through student fees. When such fees are necessary, they are announced in the course schedule and are paid at the first class session. Books and supplies are usually the responsibility of the student and may be purchased from the College Bookstore.

ATTENDANCE

Regular attendance and class participation are essential to effective teaching and learning. Adult students are expected to be regular and punctual in attendance. A minimum of 75 per cent student attendance is required to receive a certificate of completion.

Certificates: Adult education and Extension Programs are designed primarily for personal growth and development; therefore, no degree credit is awarded. North Carolina High School Completion Certificates are awarded to students who complete successfully the Adult High School Program. For the successful completion of most other adult education programs, the student is awarded an Achievement Certificate.

PROGRAMS

Adult Education and Extension Programs are offered in eight major program areas and through the Programmed Instructional Learning Laboratory. The eight major program areas are: Developmental Studies, Adult High School, Public Service, Professional Inservice, Family Life, Cultural Enrichment, Business and Industrial Services, and Community Services. The Programmed Instructional Learning Laboratory makes an important contribution to each adult education program and to many other programs offered by Surry Community College.

ADULT HIGH SCHOOL PROGRAM

Through the Adult High School Program, a student may earn a North Carolina High School Completion Certificate. Before receiving the Adult High School Certificate, an adult must demonstrate proficiency in reading, English expression, mathematics, science and social studies.

Individual instruction and personal achievement are emphasized at each of the instructional areas. Courses are available in each of the areas through programmed instruction. The objective is to help adults progress from their present educational level through a functional level of twelfth grade.

Level One:	Non-readers through grade four; basic reading, writing, arithmetic.
Level Two:	Grade five through grade eight; reading improvement, English expression, arithmetic, geography, and social studies.
Level Three:	Grade nine through grade twelve, reading improvement, English expression, mathematics, science, social studies.

Students who desire may enroll in courses in preparation for taking the General Educational Development Tests in order to qualify for the High School Equivalency Certificate. Students lacking one to three units of credit for graduation from a secondary school, may take courses to satisfy these unit requirements, providing prior arrangements are made with the appropriate school official for receiving high school credit.

PROGRAMMED INSTRUCTION LEARNING LABORATORY

The Programmed Instruction Learning Laboratory provides an opportunity for any interested adult, whether he has completed high school, college, or not, to study any of over two hundred programmed instruction courses ranging in difficulty from the elementary school level to the college level. The total cost of study is about $2.00 per year. Each of these courses is presented in a book or booklets which reduce the course content into simple, step-by-step units. Individuals studying most of these courses are completely free to set their own study pace. Students who are advised to complete phases of programs leading to a high school diploma, or are required to do remedial study in association with a college course of study, are expected to show steady progress toward a pre-determined objective of learning laboratory study. There are no teacher-administered tests, grade assignments, or set speeds of completion for most programmed instruction courses.

Many courses are included in each of the following areas: Business and Industry, English, Foreign Languages, Leisure Activities, Health and Safety, Mathematics, Psychology, Reading, Science and Technology, Social Sciences.

Any person interested in the Programmed Instructional Learning Laboratory should contact the Learning Laboratory Coordinator, Surry Community College, Dobson, North Carolina.

PUBLIC SERVICE PROGRAMS

The Public Service Programs include courses in Law Enforcement Training, Fire Service Training, Leadership Training, and Citizenship Development.

LAW ENFORCEMENT TRAINING

Law Enforcement Training is provided at the request of law enforcement agencies or individuals. Courses are especially designed as in-service and pre-service education for those engaged in law enforcement activities. Workshops and courses are offered in many areas such as the following: Courts and Laws, Elements of Offenses, Motor Vehicle Law, Criminal Investigation, Report Writing, Juveniles, Applied Psychology, Human Relations, Instructor Training, Firearms, Photography.

FIRE SERVICE TRAINING

Fire Service Training is designed to provide firemen the opportunity to gain technical information and skill in modern fire fighting. The classes are taken directly to the fireman through training sessions held in local departments and training fields in the community. Among the courses offered are the following: Introduction to Fire Fighting, Portable Fire Extinguishers, Fire Fighting Procedures, Arson Detection, Rope, Ladder, Hose, Rescue Practices, Forcible Entry, Protective Breathing Equipment, Ventilation.

LEADERSHIP TRAINING

The increasing complexity of American society demands that greater attention be given to leadership training. Leadership oriented courses are provided for civic, religious, professional, social, and other groups desiring leadership training. Courses provided are: Public Speaking, Parliamentary Procedure, Program Planning, Conferences That Work, Discussion Leadership, Committee Organization.

CITIZENSHIP DEVELOPMENT

The development of creative citizenship responsive to community potential and problems is an imperative of these times. Courses in citizenship education contribute to such development. Courses are available in these subject areas: American History, World History, International Affairs, North Carolina History, State Government, Social Problems, City and County Government.

SUPERVISORY DEVELOPMENT TRAINING

Supervisory Development Training Courses are designed for potential and active supervisors who want to prepare for more effective leadership and advancement. Only a materials fee of ten cents per student contact hour is charged. Courses are offered at the College campus or in industrial plants. The courses are flexible in terms of content and meeting times. Every effort is made to fit course content to particular industrial or business needs. Emphasis is placed on training individuals in supervisory skills which help reduce worker training time, improve worker safety records, reduce labor turnover, improve product quality, upgrade production records, and improve an industry's image. Courses are available in the following subject areas: Principles of Supervision (Seven Parts), Human Relations I and II, Art of Motivating People, Economics in Business and Industry, Effective Communications, Effective Writing, Effective Speaking, Reading Improvement, Work Measurement, Job Methods, Conference Leadership, Job Instruction Training, Creative Thinking, Industrial Safety and Accident Prevention, Industrial First Aid, The Supervisor in North Carolina, The Supervisor and Employee Benefits, Job Analysis Training, Cost Accounting for Supervisors, Supervision in Hospitals.

BUSINESS MANAGEMENT

Business Management Courses are planned for individuals employed in wholesale and retail occupations. Emphasis is placed

on improving customer and job relations, making the best use of advertising, improving individual personality and salesmanship, developing oral communications, and training individuals to function more effectively in their respective occupations. Courses and workshops are offered in these subject areas: Job Relations in Business, Customer Relations, Personality Development, Creative Salesmanship, Advertising, Marketing Research.

VOCATIONAL INSERVICE EDUCATION

Non-curriculum short courses are planned especially for adults who desire to update themselves in skilled and technical areas. Areas in which courses may be planned: Welding, Electricity, Carpentry, Agricultural Technology, Masonry, Automotive Mechanics, Electronics, Surveying.

COMMUNITY SERVICE PROGRAMS

Surry Community College will sponsor and promote a number of Community Services which contribute to the cultural, economic, and civic improvement of the community. Such services may arise from almost every program area. Community Service activities include the following: Seminars, Conferences, Forum Series, Speakers, Discussion Groups, Lecture and Film Series, Fine Arts Exhibits, Musical Programs, Community Studies, Drama Programs.

PRE-COLLEGE DEVELOPMENTAL STUDIES PROGRAM

Surry Community College offers high school graduates an intensive program in pre-college studies. The pre-college developmental program is available to all students who need strengthening in the basic areas of communication skills, mathematics, self-appraisal, how-to-study, and adjustment to college life. The schedule for each enrolled student will be planned to lead into subsequent enrollment in a college parallel, technology program, or vocational studies. Applicants are urged to complete admission procedures as stated in another section of the catalog.

Counseling interviews will enable applicants to enroll in a tailored program selected from the courses listed below.

COURSE DESCRIPTIONS

ENGL 090—Writing 3 0 0

A course for the improvement and development of writing techniques including emphasis on meaningful and logical sentence construction, paragraph building, outline preparation and themes.

ENGL 091—Reading 3 0 0

This course is designed to help the student develop speed and comprehension skills in reading; to improve listening and note-taking skills; develop vocabulary, improve study habits.

ENGL 082—Speech 3 0 0

A course in the improvement of speech patterns dealing with pronunciation, enunciation, language usage. Conversational techniques are stressed.

MATH 070—Fundamentals of Mathematics 3 0 0

A course to aid students in improving basic computational skills. "Numbers" and "operation" concepts stressed.

MATH 080—Developmental Algebra 5 0 0

Fundamentals of Algebra and application.

MATH 081—Developmental Geometry 5 0 0

Fundamentals of plane geometry and application.

PSYCH 080, 081, 082—Developmental Survey 2 0 0

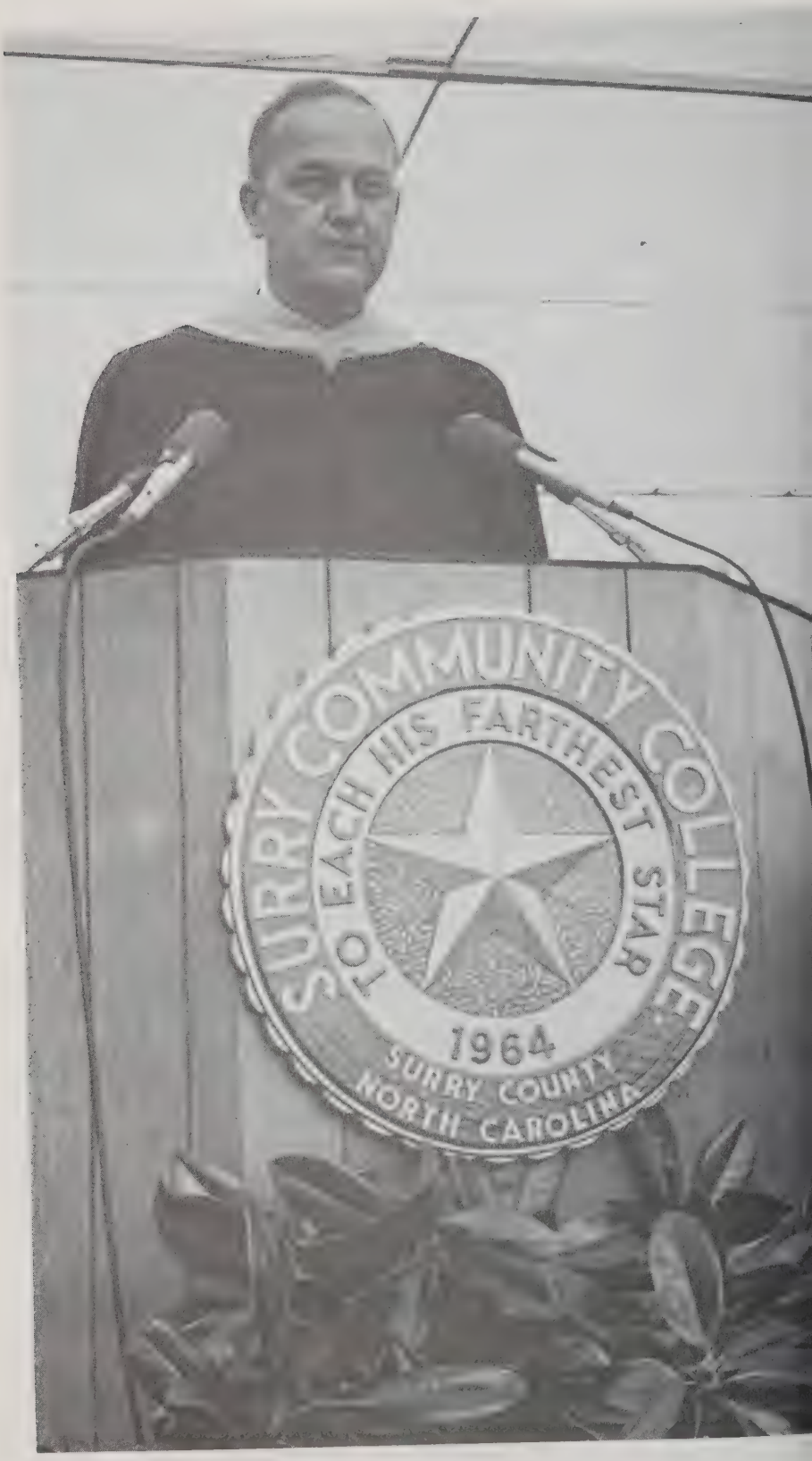
A course designed to orient the student to college life, and prepare the student for a successful learning experience. The survey will also assist the student to make an accurate assessment of himself in relation to a variety of educational and occupational possibilities and the selection of new goals if necessary.

PSYCH 083, 084, 085—Workshop Sessions 5 0 0

Individual study program with assigned work selected in critical study areas under the direction of a counselor or a teacher to programmed instruction in the Learning Laboratory

SCI 080—Science 3 0 0

Attempts to acquaint students with conventional laboratory equipment, practices, terminology and the scientific methods.


SURRY COMMUNITY COLLEGE
TO EACH HIS FARTHEST STAR
1964
SURRY COUNTY
NORTH CAROLINA

CORRESPONDENCE DIRECTORY

For further information, inquiries in specific areas should be addressed to the office indicated at Surry Community College, Dobson, N. C. 27017.

Administrative Matters and General Information	President
Business Matters	Business Manager
Admissions, Catalogs	Director of Student Personnel Service
Records, Transcripts	Registrar
Public Relations	President
Academic Information	Academic Dean
Placement	Director of Student Personnel
Student Aid	Director of Student Personnel
Evening Classes	Director of Evening Programs
High School Completion	Director of Adult Education
Extension Classes	Director of Adult Education

TELEPHONES:

Area Code 919

386-4955 386-2425

Dobson, N. C.

8:30 A. M. — 9:30 P. M., Monday through Thursday

8:30 A. M. — 5:00 P. M., Friday

MS F. ELDER, PRINTER
AIRY, N. C.

SURRY COMMUNITY COLLEGE
TO EACH HIS FARTHEST STAR
1964
SURRY COUNTY
NORTH CAROLINA

SURRY COMMUNITY COLLEGE

EVENING & EXTENSION BULLETIN

FALL QUARTER, 1969

Registration
September 3 & 4

C1969/70

GENERAL INFORMATION

Evening Division

Surry Community College offers evening courses for those who desire:

1. College credit toward a two-year Associate in Arts or Associate in Applied Sciences degree.
2. College credit courses to meet on-the-job professional requirements or for transfer to a four-year college.
3. Courses to meet specific job or interest needs.

APPLICATION

Application is made through the Evening Division Office or through the Admissions Office. New students are urged to consult a representative of one of these offices before the formal rgistration period.

ADMISSION

The college operates under an open door admissions policy. In general, the requirements are that the applicant be 18 or over and have the ability to profit from attendance. High school graduation or its equivalent is required for admission to certain programs. The Extension and Adult Education Division of the college offers a high school completion program. For answers to specific admissions questions, the applicant should consult the Evening Director or a counselor, and he should carefully read the admissions section of the general college bulletin.

CREDITS

Courses offered in the evening parallel those in the day program and carry the same college credit. Day and evening classes are frequently taught by the same instructors.

The college operates on the quarter system; generally one class hour per week is equal to one quarter hour of credit.

WITHDRAWAL

Should a student find it necessary to withdraw from the college or to withdraw from a course, he must withdraw officially at the college office. Failure to attend class or merely giving notice to an instructor will not be considered an official withdrawal and may result in a failing grade for the course. Complete academic regulations are listed in the regular college bulletin. Each student should read these regulations carefully.

CALENDAR

September 3	(Wednesday)	Registration 6:30 - 9:30 p.m.
September 4	(Thursday)	Registration 6:30 - 9:30 p.m.
September 8	(Monday)	Late registration fee applies
September 9	(Tuesday)	Evening faculty meeting 7:30 p.m.
September 10	(Wednesday)	Classes begin
October 8	Wednesday)	Last night for dropping a course without academic penalty
November 18	(Tuesday)	Classes end
November 19	(Wednesday)	
November 25	(Tuesday)	Final Examinations

FEES

College Parallel

N. C. Resident	$3.00 per credit hour
Non-Resident	$7.50 per credit hour

Technical and Vocational

N. C. Resident	$2.50 per credit hour
Non-Resident	$6.50 per credit hour

College fee	$3.00 per quarter
Late registration fee	$2.00

NOTE

For further academic information such as course descriptions and prerequisites, please consult the general college bulletin.

All evening offerings are subject to sufficient enrollment.

BUS 131	Principles of Accounting I					
BUS 131 S	Secretarial Accounting (Bookkeeping)	Tu & Th	7-9:30	T-213	3	7.50
BUS 151	Cost Accounting I	Tu & Th	7-9:30	T-229	3	7.50
BUS 280 M	Medical Terminology & Vocabulary II	Tu	7-10	T-102	3	7.50
EDP 104	Introduction to Data Processing	M & W	7-9:30	T-101	4	10.00
ART 130	Introduction to Art	Tues	7-10	L-204	3	9.00
ART 201	Oil Painting I	Thur	7-10	L-204 & L-205	3	9.00
BIO 101	Biology I	M & W	7-10	T-228	4	12.00
CHEM 101	General Chemistry I	M & W	7-10	T-229 & T-230	4	12.00
ENG 100	Developmental Reading I	Tu & Th	7-8:30	L-207	1	3.00
ENG 101	Freshman English I	Mon	7-10	L-207	3	9.00
ENG 201	Survey of English Literature I	Mon	7-10	L-204	3	9.00
HIST 101	Western Civilization I	Tues	7-10	L-113	3	9.00
MATH 101	College Mathematics I	Tues	7-10	T-227	3	9.00
MUSIC 101	Introduction to Music	Tues	7-10	L-121	3	9.00
PSYCH 201	Human Development I	Thur	4-7	L-121	3	9.00
REL 102	Introduction to New Testament	Thur	7-10	L-113	3	9.00
SOC 201	Introduction to Sociology	Wed	7-10	L-207	3	9.00
SPAN 101	Elementary Spanish I	M & W	7-9:30	L-105	3	9.00

EVENING DIVISION

Surry Community College

Credit Courses

Fall, 1969

Course & No.	Course Title	Night	Time	Room	Credit Hours	Cost
AUTO 1101 A	Internal Combustion Engines I	M & W	7-10	T-112 & S-131	4	$10.00
CAR 1102 A	Carpentry: Millwork and Cabinetmaking	M & W	7-10	S-122	4	10.00
DFT 101	Technical Drafting I	Tu & Th	7-10	T-111	3	7.50
ELC 1112 A	AC & DC Electricity I	Tu & Th	7-10	S-122	4	10.00
MEC 1101 A	Machine Shop I	Tu & Th	7-10	S-126	4	10.00
MEC 1102 B	Machine Shop IV	M & W	7-10	S-126	4	10.00
T-MATH 111	Technical Math II	Tu & Th	7-9:30	T-101	5	12.50
WELD 1121 A	Arc Welding I	M & W	7-10	S-113	4	10.00
BUS 102	Typing I	M & W	6-8	T-103	3	7.50
BUS 103	Typing II	M & W	6-8	T-102	3	7.50

ADULT AND CONTINUING EDUCATION DIVISION
SURRY COMMUNITY COLLEGE

Non-Credit Class Schedule
Fall Quarter, 1969

Registration will be held September 8 and 9 from 7:00 - 9:00 p.m. in the lobby of the Learning Resources Building.

COURSE TITLE	Day	Hours	Location	Course Hrs.	Information
Business & Industrial Service					
Principles of Supervision	Tues.	7 - 9	T-228	32	
Human Relations	Thur	7 - 9	T-112	24	
Creative Salesmanship	Mon.	7 - 9	T-203	20	
Brick Masonry	Thur.	7 - 9	Shop	36	
Small Gasoline Engine Repair	Thur	7 - 9	T-109	20	
Elementry Blue Print Reading	Mon.	7 - 9	T-111	20	
Sewing Machine Mechanics	Off campus—Register by calling 386-1015				
Horse Shoeing	Off campus—Register by calling 386-1015				
Oil Burner Servicing	Tues.		T-109	20	
Cataloging for Auto Parts Salesmen	Thur.		T-203	20	
Carburetors	Tues.		S-131	20	
Dairy Management	Tues.		T-112	20	Course covers feeding, breeding, & record keeping
Creatiye Arts					
Cake decorating	Mon.		L-11	20	
Ceramics	Off campus—Register by calling 386-1015				
Decoupage	Thurs.		L-11	20	

Family Life				
Personal Sewing	Off campus—Register by calling 386-1015			
Drapery Making	Mon.	7-9	T-227	20
Knitting	Tues.		L-11	20
Flower Arranging	Wed.		T-203	20
Women's Physical Conditioning	Thur.		S-106	20
Men's Physical Conditioning	Mon.		S-106	20
Bridge	Wed.		L-11	20
Personal Income Tax	Mon.		T-109	20
Family Finance for Widows	Thur.		T-228	20
Elementary Astronomy	Tues.		T-203	30
Cultural Enrichment				
Beginning Drawing	Wed.		L-225	20
History of Surry County	Mon.		T-213	30
Church Music	Mon.		L-212	20

Developmental Studies

Adult Basic Education (grades 1-8)

Adult Basic Education classes are available in Mount Airy, Elkin, Boonville, Jonesville, and Yadkinville. Call the college for further information.

Programmed Learning Laboratory

High School Diploma

General Educational Development (GED) Preparation

Learning Laboratories for high school completion are available in three locations. They are Dobson, Mount Airy, and Boonville.

A schedule can be arranged to accommodate any person regardless of his working schedule. Call the college, 386-1015 for further information.

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SURRY COMMUNITY COLLEGE

EVENING & EXTENSION BULLETIN

WINTER QUARTER, 1969-70

Registration

November 19, 20, 24, 25 and December 1

GENERAL INFORMATION

Evening Division

Surry Community College offers evening courses for those who desire:

1. College credit toward a two-year Associate in Arts or Associate in Applied Sciences degree.

2. College credit courses to meet on-the-job professional requirements or for transfer to a four-year college.

3. Courses to meet specific job or interest needs.

APPLICATION

Application is made through the Evening Division Office or through the Admissions Office. New students are urged to consult a representative of one of these offices before the formal registration period.

ADMISSION

The college operates under an open door admissions policy. In general, the requirements are that the applicant be 18 or over and have the ability to profit from attendance. High school graduation or its equivalent is required for admission to certain programs. The Extension and Adult Education Division of the college offers a high school completion program. For answers to specific admissions questions, the applicant should consult the Evening Director or a counselor, and he should carefully read the admissions section of the general college bulletin.

CREDITS

Courses offered in the evening parallel those in the day program and carry the same college credit. Day and evening classes are frequently taught by the same instructors.

The college operates on the quarter system; one class hour per week is equal to one quarter hour of credit.

WITHDRAWAL

Should a student find it necessary to withdraw from the college or to withdraw from a course, he must withdraw officially at the college office. Failure to attend class or merely giving notice to an instructor will not be considered an official withdrawal and may result in a failing grade for the course. Complete academic regulations are listed in the regular college bulletin. Each student should read these regulations carefully.

EVENING DIVISION

CALENDAR

Winter Quarter, 1969-70

November 19, 20, 24, 25 ..... Registration 6:30 - 8:30 p.m.

December 1 (Monday) ..... Registration 6:30 - 8:30 p.m.

December 2 (Tuesday) ..... Classes begin
Late registration fee applies

January 8 (Thursday) ..... Last night for dropping a course
without academic penalty

February 25 (Wednesday) ..... Classes end

February 26 (Thursday) —
March 4 (Wednesday) ..... Final examinations

FEES

College Parallel

N. C. Resident	$3.00 per credit hour
Non-Resident	$7.50 per credit hour

Technical and Vocational

N. C. Resident	$2.50 per credit hour
Non-Resident	$6.25 per credit hour
College fee	$3.00 per quarter
Late Registration Fee	$2.00

NOTE

For further academic information such as course descriptions and prerequisites, please consult the general college bulletin.

All evening offerings are subject to sufficient enrollment.

EVENING DIVISION

SURRY COMMUNITY COLLEGE

Credit Courses

Winter, 1969-70

COURSE NO.	COURSE TITLE	HOURS CREDIT	MEETING DAYS	ROOM NO.	FEE
ART-201	Oil Painting I	3	7-10 Tu	L-204 & L-205	$ 9.00
ART-202	Oil Painting II	3	7-10 Th	L-204 & L-205	9.00
AUTO-1101B	Internal Combustion Engines II	4	7-10 M & W	T-112 & S-131	10.00
BUS-101	Introduction to Business	3	7-10 W	T-109	7.50
BUS-102	Typewriting I	3	6-8:30 M & W	T-103	7.50
BUS-103	Typewriting II	3	6-8:30 M & W	T-102	7.50
BUS-105	Business Mathematics	5	7-9:30 Tu & Th	T-109	12.50
BUS-106	Shorthand I	4	7-9:30 M & W	T-101	10.00

BUS-132	Principles of Accounting II	3	7-9:30 Tu & Th	T-201	9.00
DFT-102	Technical Drafting II	3	7-10 Tu & Th	T-111	7.50
ELC-1112B	AC & DC Electricity II	4	7-10 Tu & Th	T-203 & S-122	10.00
ENG-102	Freshman English II (Sec. 1)	3	7-10 M	L-207	9.00
ENG-102	Freshman English II (Sec. 2)	3	7-10 M	L-113	9.00
ENG-202	Survey of English Literature II	3	7-10 M	L-204	9.00
HIST-102	Western Civilization II	3	7-10 Tu	L-113	9.00
MATH-102	College Mathematics II	3	7-10 Tu	T-227	9.00
MEC-1101B	Machine Shop Processes II	4	7-10 Tu & Th	S-126	10.00
MUSIC-102	History of Music	3	7-10 Tu	L-121	9.00
PSYCH-201	Human Development I	3	7-10 W	L-207	9.00
REL-101	Introduction to Old Testament	3	7-10 Th	L-207	9.00
SPAN-101	Elementary Spanish I	3	7-10 Th	L-105	9.00
SPEECH-101	Fundamentals of Speech I	3	7-10 Th	L-207	9.00
WELD-1121B	Arc Welding II	4	7-10 M & W	S-113	10.00

ADULT AND CONTINUING EDUCATION DIVISION
SURRY COMMUNITY COLLEGE

Non-Credit Class Schedule

Winter Quarter, 1970

Registration will be held January 5, 1970 from 7:00-9:00 p.m. in the lobby of the Learning Resources Building, or you may pre-register for any of the following courses by calling 386-1015 and ask that your name be put on the class roll.

COURSE TITLE	Day	Meeting Time	Room	Length	Other
BUSINESS AND INDUSTRIAL SERVICE					
Human Relations (SDT-2)	Tues.	6:30-9:30	Sci. Lect.	30 hrs.	2nd SDT
Creative Salesmanship	Thurs.	6:30-9:30	T-101	30 hrs.	Course
Dairy Management	Tues.	6:30-9:30	T-213	30 hrs.	
Small Gasoline Engine Repair	Thurs.	6:30-9:30	S-131	30 hrs.	
Photography	Wed.	6:30-9:30	T-213	30 hrs.	
Film Development	Mon.	6:30-9:30	T-213	30 hrs.	
Investments	Thurs.		T-213	30 hrs.	
CREATIVE ARTS					
Oil Painting II	T.B.A.*	6:30-9:30	T.B.A.*	30 hrs.	
Flower Arranging	Wed.	6:30-9:30	T-203	30 hrs.	
Knitting I	Tues.	6:30-9:30	T-101	30 hrs.	
Cake Decorating	Tues.	6:30-9:30	T-228	30 hrs.	
Decoupage	Mon.	6:30-9:30	S-122	30 hrs.	

COURSE TITLE	Day	Meeting Time	Room	Length	Other
FAMILY LIFE & HOBBIES					
Personal Sewing	Wed.	6:30-9:30	Sci. Lect.	30 hrs.	
Drapery Making	Mon.	6:30-9:30	T-227	30 hrs.	
Elementary Astronomy	Mon.	6:30-9:30	T-203	30 hrs.	
Parliamentary Procedure	Mon.	6:30-9:30	Sci. Lect.	30 hrs.	
Social Dancing	Mon.	6:30-9:30	S-106	30 hrs.	
Guidance for Parents of College Bound Students	Thurs.	7:00-9:00	Sci. Lect.	6 hrs.	
Mouth to Mouth Resuscitation & Heart Massage	Mon.	7:00-9:00	T-201	6 hrs.	
Personal Income Tax	Mon.	7:00-9:00	T-229	20 hrs.	
CULTURAL ENRICHMENT					
History of Surry County	Thurs.	6:30-9:30	L-113	30 hrs.	
Church Music	Mon.	7:00-9:00	L-121	20 hrs.	
Community College Chorus	Thurs.	7:00-9:00	L-121	20 hrs.	

DEVELOPMENTAL STUDIES

Adult Basic Education (grades 1-8)

Adult Basic Education classes are available in Mount Airy, Elkin, Boonville, Jonesville, and Yadkinville. Call the college for further information.

PROGRAMMED LEARNING LABORATORY

High School Diploma
General Educational Development (GED) Preparation

Learning Laboratories for high school completion are available in three locations. They are Dobson, Mount Airy, and Boonville. A schedule can be arranged to accommodate any person regardless of his working schedule. Call the college, 386-1015 for further information.

GED Testing

Required for granting high school certificate. Call the college for further information.

*T.B.A. — To be arranged

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SURRY COMMUNITY COLLEGE

EVENING & EXTENSION BULLETIN

SPRING QUARTER, 1970

Registration

March 5 & 9

GENERAL INFORMATION

Evening Division

Surry Community College offers evening courses for those who sire:

1. College credit toward a two-year Associate in Arts or Associate Applied Sciences degree.
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3. Courses to meet specific job or interest needs.

Application

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Admission

The college operates under an open door policy. In general, the requ ments are that the applicant be 18 or over and have the ability to profit f attendance. High school graduation or its equivalent is required for ad sion to certain programs. The Extension and Adult Education Divisio the college offers a high school completion program. For answers to spe admissions questions, the applicant should consult the Evening Director counselor, and he should carefully read the admissions section of the gen college bulletin.

Credits

Courses offered in the evening parallel those in the day program carry the same college credit. Day and evening classes are frequently ta by the same instructors.

The college operates on the quarter system; one class hour per wee equal to one quarter hour of credit.

Withdrawal

Should a student find it necessary to withdraw from the college o withdraw from a course, he must withdraw officially at the college of Failure to attend class or merely giving notice to an instructor will no considered an official withdrawal and may result in a failing grade for course. Complete academic regulations are listed in the regular college b tin. Each student should read these regulations carefully.

EVENING DIVISION CALENDAR

Spring Quarter, 1970

March 5 (Thursday)	Registration 6:30 - 8:30 p.m.
March 9 (Monday)	Registration 6:30 - 8:30 p.m.
March 10 (Tuesday)	Classes begin Late registration fee applies
March 27 - March 31	Easter recess
April 1 (Wednesday)	Classes resume
April 6 (Monday)	Last night for dropping a course without academic penalty
May 25 - May 28	Final examinations

FEES

College Parallel

N. C. Resident	$3.00 per credit hour
Non-Resident	$7.50 per credit hour

Technical and Vocational

N. C. Resident	$2.50 per credit hour
Non-Resident	$6.25 per credit hour

College fee	$3.00 per quarter
Late Registration Fee	$2.00

NOTE

For further academic information such as course descriptions and pre-requisites, please consult the general college bulletin.

All evening offerings are subject to sufficient enrollment.

EVENIN
SURRY COMM
Cred
Spring

COURSE NO.	COURSE TITLE	CREDIT HOURS
ART-202	Oil Painting II	3
ART-203	Oil Painting III	3
BUS-102	Typewriting I	3
BUS-103	Typewriting II	3
BUS-110	Office Machines I	3
BUS-111	Office Machines II	3
BUS-131	Principles of Accounting I	3
BUS-133	Principles of Accounting III	3
BUS-214E	Secretarial Procedures	4
BUS-272	Principles of Supervision	3
CARP-1104A	Cabinetmaking I	1
DFT-103	Technical Drafting III	3
EDP-104	Introduction to Data Processing	4
ELC-101A	Fundamentals of Electricity I	3
ELC-1113A	AC & DC Machines & Controls I	4
ENG-103	Freshman English III	3
ENG-203	English Literature III	3
HIST-103	Western Civilization III	3
MATH-103	College Mathematics III	3
MEC-1102A	Machine Shop Processes III	4
PHIL-201	Introduction to Philosophy I	3
PMT-1112A	Engine Electrical & Fuel Systems I	4
PSYCH-202	Human Development II	3
SPAN-203	Spanish Civilization III	3
SPAN-102	Elementary Spanish II	3
WELD-1120A	Oxyacetylene Welding I	4

VISION
TY COLLEGE

ses

, 1970

IEETING DAYS	ROOM NO.	FEE
Tu	L-204 & L-205	$9.00
Th	L-204 & L-205	9.00
0 M & W	T-103	7.50
0 M & W	T-102	7.50
10:30 M & W	T-108	7.50
10:30 M & W	T-108	7.50
0 M & W	T-101	9.00
0 Tu & Th	T-213	9.00
0 Tu & Th	T-108 & T-103	10.00
W	T-109	7.50
M	S-122	2.50
Tu & Th	T-111	7.50
0 Tu & Th	T-101	10.00
0 M & W	T-211	7.50
Tu & Th	T-203 & S-122	10.00
M	L-207	9.00
M	L-204	9.00
Tu	L-113	9.00
Tu	T-227	9.00
Tu & Th	S-126	10.00
Th	L-113	9.00
M & W	T-112 & S-131	10.00
W	L-207	9.00
M	L-105	9.00
Th	L-105	9.00
M & W	S-113	10.00

ADULT AND CONTINUING EDUCATION DIVISION
SURRY COMMUNITY COLLEGE

Non-Credit Class Schedule
Spring Quarter, 1970

Register for any of the following courses by calling 386-1015 and ask that your name be put on the class roll

Course Title	Day	Meeting Time	Location	Length
BUSINESS & INDUSTRIAL SERVICE				
Principles of Supervision I	Tue.	6:30-9:30	Sci. Lect. Rm.	30 hrs.
Salesmanship	Wed.	6:30-9:30	Sci. Lect. Rm.	30 hrs.
Brick Masonry	Sat.	9 am-12 Noon	Shop	30 hrs.
Blue Print Reading	Mon.	6:30-9:30	T-111	30 hrs.
Carburetor Repair	Thur.	6:30-9:30	S-131	30 hrs.
Dairy Management	Tue.	6:30-9:30	T-201	30 hrs.
Film Development	Tue.	6:30-9:30	T-109	30 hrs.
CREATIVE ARTS				
Ceramics	Fine Arts Center in Mount Airy			
Interior Decorating	Thur.	6:30-9:30	L-121	30 hrs.
Flower Arranging	Mon.	6:30-9:30	T-213	30 hrs.
Knitting I	Mon.	6:30-9:30	T-109	30 hrs.
Cake Decorating	Thur.	7:00-9:00	T-228	20 hrs.
Decoupage	Mon.	6:30-9:30	S-126	30 hrs.

Course Title	Day	Meeting Time	Location	Length
FAMILY LIFE & HOBBIES				
Personal Sewing	Mon.	6:30-9:30	Sci. Lect. Rm.	30 hrs.
Golf	Thur.	6:30-8:30	S-106	20 hrs.
Tennis	Tue.	6:00-8:00	S-106	20 hrs.
Judo	Mon.	6:30-9:30	S-106	30 hrs.
Horticulture & Landscaping	Mon.	6:30-9:30	T-201	30 hrs.
Social Dancing	Wed.	7:00-9:00	S-106	20 hrs.
CULTURAL ENRICHMENT				
History of Surry County	Mon.	7:00-9:00	L-13	20 hrs.
Church Music	Mon.	7:00-9:00	L-121	20 hrs.
Studies in the Old Testament	Tue.	6:30-9:30	L-207	30 hrs.
Oil Painting	Fine Arts Center in Mount Airy			

DEVELOPMENTAL STUDIES

Adult Basic Education (grades 1-8)

Adult Basic Education classes are available in Mount Airy, Elkin, Boonville, Jonesville, and Yadkinville. Call the college for further information.

PROGRAMMED LEARNING LABORATORY

Learning Laboratories for high school completion are available in three locations. They are Dobson, Mount Airy, and Boonville. A schedule can be arranged to accommodate any person regardless of his working schedule. Call the college, 386-1015, for further information.

High School Diploma
General Educational Development (GED) Preparation
GED Testing

Required for granting high school certificate. Call the college for further information.

Surry Community College
Dobson, N. C. 27017
Phone 386-1015

BULK RATE
PAID
U. S. POSTAGE
Dobson, N. C.
Permit No. 10

Mr. George Stevenson
The North Carolina Collection
The Library, UNC
Chapel Hill, N. C. 27514

SURRY COMMUNITY COLLEGE

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1969

JANUARY

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SURRY COMMUNITY COLLEGE

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Catalog 1969-1971

Established by authority of the 1963
General Assembly under Chapter 115A.

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Box 304, Dobson, North Carolina 27017
Telephone 386-1015 (Area Code 919)

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Surry Community College Bulletin, Volume III, Number 1,
1969, Announcements for 1969-1971.

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Surry Community College
Dobson, N.C.

November 1969

SE NOTE THE FOLLOWING REVISIONS IN 1969-1971 CATALOG:

Page 32, 34, 35, 36, 37, & 63

BUS 105 Business Mathematics 3-0-3- should read:
BUS 105 Business Mathematics 5-0-5

Page 39 & 40

PHY 101 Physics: Properties of Matter Should read:
PHY 101 Mechanics

Page 39 & 41

PHY 102 Physics: Work, Energy, Power should read:
PHY 102 Properties of Matter and Heat

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Delete the statement Freshman level courses are indicated by numbers ranging between 100-200; Sophmore level courses 200-300.

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COLLEGE CALENDAR 1970-71

FALL QUARTER — 1969-70

Sept. 3 & 4 — Wed. & Thurs. ..... Faculty Workshop
Sept. 5 & 8 — Fri. & Mon. ..... Day Division Registration
(Evening Division Registration to be announced)
September 9 — Tuesday ..... Orientation
September 10 — Wednesday ..... Classes begin
September 17 — Wednesday ..... Last day to enroll or add classes
October 8 — Wednesday ... Last day to drop without academic penalty
October 17 — Friday ..... Mid-term reports due
Nov. 20 - Nov. 26 — Thurs. - Wed. ..... Fall quarter exams
Nov. 27 & 28 — Thurs. & Fri. ..... Thanksgiving holiday

WINTER QUARTER — 1969-70

December 1 — Monday ..... Registration
December 2 — Tuesday ..... Classes begin
December 12 — Friday ..... Last day to enroll or add classes
Dec. 20 - Jan. 2 ..... Christmas holiday
January 5 — Monday ..... Classes resume
January 9 — Friday ..... Last day to drop without academic penalty
January 16 — Friday ..... Mid-term reports due
Feb. 26 - March 4 — Thurs.-Wed. ..... Winter quarter exams
March 5 — Thursday ..... Faculty workshop

SPRING QUARTER — 1969-70

March 9 — Monday ..... Registration
March 10 — Tuesday ..... Classes begin
March 17 — Tuesday ..... Last day to enroll or add classes
March 27 - March 31 ..... Easter recess
April 1 — Wednesday ..... Classes resume
April 3 — Friday ..... Last day to drop without academic penalty
April 15 — Wednesday ..... Mid-term reports due
May 22 - 28 — Fri.-Thurs. ..... Spring quarter exams
May 28 — Thursday ..... Graduation
May 29 — Friday ..... Faculty workshop

SUMMER QUARTER — 1969-70

June 3 - June 5 — Wed.-Fri. ..... Registration
June 8 — Monday ..... First Session begins
July 10 — Friday ..... First Session ends
July 15 - July 17 — Wed.-Fri. ..... Registration — Second Session
July 20 — Monday ..... Second Session begins
August 21 — Friday ..... Second Session ends
August 21 — Friday ..... Graduation

COLLEGE CALENDAR 1970-71

FALL QUARTER — 1970-71

Sept. 3 & 4 — Thurs. & Fri. ..... Faculty workshop
Sept. 7 & 8 — Mon. & Tues. ..... Day Division Registration
(Evening Division Registration to be announced)
September 9 — Wednesday ..... Orientation
September 10 — Thursday ..... Classes begin
September 17 — Thursday ..... Last day to enroll or add classes
October 9 — Friday ..... Last day to drop without academic penalty
October 16 — Friday ..... Mid-term reports due
Nov. 19 - Nov. 25 — Thurs.-Wed. ..... Fall quarter exams
Nov. 26 & Nov. 27 — Thurs & Fri. ..... Thanksgiving holiday

WINTER QUARTER — 1970-71

November 30 — Monday ..... Registration
December 1 — Tuesday ..... Classes Begin
December 8 — Tuesday ..... Last day to enroll or add classes
January 4 — Monday ..... Classes resume
January 4 — Monday ..... Classes Resume
January 7 — Friday ..... Last day to drop without academic penalty
January 15 — Friday ..... Mid-term reports due
Feb. 25 - March 3 — Thurs.-Wed. ..... Winter quarter exams
Maarch 3 — Wednesday
March 4 — Thursday ..... Faculty workshop

SPRING QUARTER — 1970-71

March 8 — Monday ..... Registration
March 9 — Tuesday ..... Classes begin
March 16 — Tuesday ..... Last day to enroll or add classes
April 2 — Friday ..... Last day to drop without academic penalty
April 9 — Friday ..... Mid-term reports due
April 9 - April 13 — Fri.-Tues. ..... Easter recess
April 14 — Wednesday ..... Classes resume
May 21 - May 27 — Fri.-Thurs. ..... Spring quarter exams
May 28 — Friday ..... Graduation
May 31 — Monday ..... Faculty workshops

SURRY COMMUNITY COLLEGE

BOARD OF TRUSTEES

HOWARD O. WOLTZ, JR. Chairman	Mount Airy, North Carolina
William Allen, Jr.	Elkin, North Carolina
Mrs. Hugh G. Chatham	Elkin, North Carolina
Foy Clark	Mount Airy, North Carolina
Frank Comer	Dobson, North Carolina
Charles L. Folger	Dobson, North Carolina
Thomas L. Folger	Mount Airy, North Carolina
John P. Frank	Mount Airy, North Carolina
Robert M. Lowe	Lowgap, North Carolina
Robert E. Merritt	Mount Airy, North Carolina
Oscar Smith	Pilot Mountain, North Carolina
Robert Yarborough	Jonesville, North Carolina

COLLEGE PERSONNEL

ADMINISTRATION

I. JOHN KREPICK ..... PRESIDENT

James H. Templeton ..... Academic Dean

George E. Stockton ..... Dean of Student Personnel

H. Clyde Johnson ..... Business Manager

Carlos P. Surratt .... Associate Dean and Director of Evening Programs

Raymond C. Freeman ..... Director of Learning Resources

James M. Reeves ..... Director of Adult and Continuing Education

Claude V. Ayers ..... Assistant Director of Adult and Continuing Education

Ruth Thompson ..... Registrar and Counselor

Bill H. Davis, Jr. ..... Counselor and Director of Financial Aid

Weldon Reece ..... Coordinator of Learning Laboratory

C. Wayne Motsinger ..... Counselor and Student Activities

OFFICE AND GENERAL STAFF

Betty F. Hemmings ..... Bookkeeper
Pauline W. Eads ..... Library Clerk
Paula W. Pratt ..... Library Clerk
Jean S. Badgett ..... Secretary
Susan Johnson ..... Secretary
Judy Morris ..... Secretary
Judy W. Reece ..... Secretary
Alma M. Shinault ..... Secretary
Judy S. Stephens ..... Secretary
Flossie Bryant ..... Bookstore
Leona Cook ..... Snack Bar Manager
Beulah Marion ..... Snack Bar
Graham Lawrence ..... Superintendent of Buildings and Grounds
Charles Gentry ..... Custodian
Stanford Williams ..... Custodian
Claude Marion ..... Custodian

FACULTY

ATKINS, BROADUS D. ..... Automotive Mechanics
A.A.S. — Central Utah Vocational School

AYERS, CLAUDE V. ..... Assistant Director of Adult and
B.S. — Appalachian State University Continuing Education
M.A.—Appalachian State University

COLLINS, JOHN K. ..... Drafting
B.S. — Western Carolina University — M. Ed. North Carolina State University

COX, ABBIE ROSE ..... Art
B.S., M.A. — Columbia University

DAVIS, BILL H., JR. ..... Counselor
B.S. — Appalachian State University; M.A. — Appalachian State University, Additional work at N. C. State University

FREED, RAYMOND ERIC ..... Drafting and Design
A.A.S. — Forsyth Technical Institute; Additional Work — North Carolina State University

FREEMAN, HARRIS DALE ..... English
B.S., M.S. — Appalachian State University
B.S., M.S.—Appalachian State University

FREEMAN, RAYMOND CARL ..... Director of Learning Resources
B.S. — University of North Carolina; M.A. — Appalachian State University; Additional Graduate Work Appalachian State Univ.

GORRIARAN, ADOLFO ..... Spanish
Bachelor in Letters — Instituto del Vedado; Doctor of Law — University of Havana, Cuba.

HILL, KENNETH W. ..... Physics
B.S. — Drexel Institute of Technology; M.S. — University of North Carolina

HINSHAW, PAUL ..... Physical Education
B.S. — Appalachian State University; M.A. — Appalachian State University

HOLCOMB, CONRAD C., JR. ..... Social Science
A.B. — University of North Carolina; M.A. — George Washington University

HUDSON, COY L. ..... Agriculture
B.S. — North Carolina State University; M. Ed. — North Carolina State University

HUTCHENS, JAMES A. ..... History and Economics
A.B. — University of North Carolina; M. A. — University of North Carolina

JOHNSON, H. CLYDE ..... Business Manager
A.B. — Elon College; M.A.T. — University of North Carolina

JONES, GEORGE W. ..... Carpentry
Vocational Extension Courses — North Carolina State University

KREPICK, I. John ..... President
B.S. — Bloomsburg State College; M.A. — New York University; Additional graduate work — University of Pennsylvania

LEAR, C. MERRITT ..... Electronics
B.S. — University of North Carolina; M.S. — University of North Carolina

McCANN, J. GUY ..... Mathematics
B.S. — Appalachian State University; M.A. — Appalachian State University; Additional graduate work — University of North Carolina

MAYE, JOSEPH B. ..... Psychology
B.A. — Lenoir-Rhyne; B.D. — Duke University; M.S. — Radford College; Additional graduate work — Radford College

MOTSINGER, C. WAYNE ..... Counseling
A.B. — Guilford College

REECE, WELDON ..... Learning Laboratory
B.S. — Guilford College

REEVES, JAMES M. ..... Director of Adult and Continuing Education
B.S. — Appalachian State University; M.A. — Appalachian State University

SELBY, T. NORWOOD ..... English
B.A., M.A.T. — University of North Carolina

SELTZER, RICHARD C. ..... Biology
A.A.S. — Agricultural and Technical Institute at Alfred;
B.S. — University of Georgia; M.S. — Ohio University

SHEPHERD, CARLYLE M. ..... Physics
B.S. — Appalachian State University; M.A. — Appalachian State University

SHEPHERD, MARGARET F. ..... Reading
B.S. — Appalachian State University; M.A. — Appalachian State University

SPARGER, GOLDIE S. ..... Secretarial Science
B.S. — Steed College; M.A. — Appalachian State University

SPEAS, CAROL M. ..... English
A.B. — University of North Carolina; M.A.T. — University of North Carolina

STOCKTON, GEORGE E. ..... Dean of Student Personnel
B.S. — Trenton State College; M. Ed. — Temple University; Additional graduate work — University of Texas

SURRATT, CARLOS P. ..... Associate Dean and Director of Evening Programs
A.B. — University of North Carolina; M. A. — Appalachian State University; Additional graduate work — North Carolina State University; University of North Carolina at Greensboro

TEMPLETON, JAMES H. ..... Academic Dean
B.S. — Appalachian State University; M.A. — Appalachian State University; Additional graduate work — University of North Carolina

THOMAS, ROY M. ..... Welding
Certificates — Department of the Navy Service Schools

THOMPSON, RUTH ..... Registrar; Counselor
B.S. — University of North Carolina; M.S. — University of North Carolina; Additional graduate work — University of North Carolina

VAN HORN, JOHN M. ..... English
B.S.—Appalachian State University; M.A.—Appalachian State U.

WADE, JUDY ..... Biology
B.S. — Wake Forest University; M.A.T. — University of North Carolina

WALLACE, JAMES H. ..... Business Administration
B.S. — North Carolina State University; M.B.A. — Harvard University

WENGER, RAYMOND ..... Chemistry
B.S. — Pennsylvania State University; M.S. — Pennsylvania State University; Ph.D. — Purdue University

WHITE, WILLIAM B. ..... Learning Laboratory
B.S. — North Carolina State University; M.S. — North Carolina State University

COLLEGE AIMS AND OBJECTIVES

Surry Community College will strive to offer to its community a program to improve skills and develop an intellectual understanding of life. The education of the whole man—the development of all men and of all man's capabilities—aesthetic, social, intellectual and manipulative—will be its goal.

Surry Community College, a two-year college sponsored by Surry County and established under the provision of Chapter 115A of the General Statutes, assumes its responsibilities to:

—prepare students who desire to transfer to other colleges, by providing them with an adequate preparation of two years of college credit courses.

—prepare those students who wish to qualify for technical occupations by providing them with a strong program of studies appropriate to the needs of the individual and the community.

—provide a program of vocational education for those desiring to upgrade themselves in their chosen vocation or who wish to learn new skills or a new trade.

—encourage students to participate in extracurricular activities to the end that service to the college community may be demonstrated and at the same time foster their own sense of development and well-being.

—provide varied-educational programs for the adult members of the service area who wish to improve their personal efficiency, enrich their cultural lives, or develop basic education skills.

HISTORY

Long before the publications of the Carlyle Report citizens of Surry County became interested in establishing a community college in the area. In 1960, the Mount Airy Lions Club appointed a committee of five members to study the possibilities and to communicate with the Division of Higher Education in Raleigh. In 1962, the committee was expanded to include all major civic groups in the county.

Local newspapers and radio stations endorsed the project and expressed wholehearted aproval. By May, 1963, interest in a community college had reached a point that a county-wide meeting was held in Dobson to discuss procedural steps. Following the meeting, the Surry County Board of Commissioners and the Boards of Education of the Elkin City Schools, the Mount Airy City Schools, and the Surry County Schools endorsed the community college project. Steps were taken to initiate a county-wide study.

The Surry County Board of Commissioners appointed a Community College Steering Committee on August 5, 1963, composed of fourteen members. This committee voted unanimously to complete the county survey and to submit an application to the State Board of Education at its December meeting for a comprehensive community college for Surry County. The application was submitted and approved by the State Board on January 9, 1964. On November 2, 1964, I. John Krepick was elected President of the Surry Community College.

FACILITIES

Construction of College facilities began in March, 1966, on a 46-acre site on Highway 601, less than a mile south of Dobson, North Carolina. Classes began using the compus facilities in September, 1967. The campus includes three major structures . . . a science-technical building, shop building, and a learning resources building. These building, shop building, and a learning resources building. These buildings house classrooms, four shop areas. business and science laboratories, learning laboratory, language laboratory, art studio, two lecture auditoriums, a completely furnished library, administrative offices, student study and faculty lounge areas, a snack bar, and a bookstore. On-campus parking is available. A fully equipped physical education facility is to be constructed by September 1970.

LIBRARY-MEDIA CENTER

The library-media center is an integral part of the College educational program and is administered in the belief that its resources play an important part in a student's education. The collection centers on various curricula offered and is supplemented by books and other materials of general interest. Study carrels, music listening alcoves, microfilm reference collection, tape recordings, motion pictures, filmstrips, transparencies, records, and slides provide students and faculty with educational aids.

Library-media center personnel are on duty from 8 a.m. to 9 p.m. Library rules are stated in the Student Handbook.

ACCREDITATION

Surry Community College is a comprehensive public community college operating under the direction of the North Carolina Department of Community Colleges and is accredited by the State Board of Education. The college is a recognized Candidate for Accreditation by the Southern Association of Colleges and Schools.

ADMISSIONS POLICY

Surry Community College is an "open-door" college and is not bound by restrictive admissions policies insofar as admission tests are concerned. It is the feeling of the college staff that secondary school records more accurately predict college success than any other criteria. However, since college transfer students will, in some cases, need the scholastic aptitude test for transfer, it is recommended that prospective college parallel students take this test while in high school.

The College will administer various tests which assist in the placement of students in the most suitable program. A personal interview with an admissions officer will aid the student to determine his specific educational objectives. Where scores on tests indicate a lack of readiness to commence college-level work, the student will be assigned to a remedial studies program (non-credit) or to a learning laboratory. Most curricula require high school graduation or equivalent.

APPLICATION PROCEDURES

1. Complete an application and enclose a $10 application fee to the Admissions Office. This fee will be applied toward the tuition for the first quarter of college attendance. Students are urged to submit applications well in advance of the quarter which is selected for enrollment.
2. Upon receipt of the application the prospective student will receive detailed instructions regarding admission procedures.
3. Beginning students should request their high school to forward a transcript of their work to the Admissions Office.
4. Students transferring from another college will be accepted at the discretion of the Admission Office. Transfer students should request official transcripts of all work attempted elsewhere. Such transcripts must be sent directly to Surry Community College.
5. Before final acceptance, a student must have a physical examination. The medical form is provided.

TRANSFER CREDIT

A transfer student must also follow the procedure for admission. Each application will be treated upon its individual merit. Credit will be granted for work of at least "C" grade which is applicable to the program selected at this College. Requests for evaluation of credit earned elsewhere must be made in writing and should be addressed to the admissions office.

COUNSELING SERVICE

The prospective student will be given the opportunity to discuss his program with a professional counselor. Most full-time students will be required to arrange such an interview after transcripts have been received and analyzed.

A student who plans to transfer to a four-year college upon completion of the work at Surry Community College should inform his counselor of such plans at the time of his first interview. If possible,

the student should indicate the institution to which he plans to transfer so that a program appropriate to the curriculum requirements of that institution might be developed.

CLASS ATTENDANCE

Absences are serious deterrents to good scholarship. Regular attendance is regarded as an essential part of the educational process. The student is expected to benefit by classroom discussion as well as his daily text assignment.

Although the college has made no provisions for excusing absences from classes, an occasional absence might be absolutely necessary. Such absences in no way lessen the student's responsibility for meeting the requirements of the class. It will be the student's responsibility to contact the instructor for any missed assignment.

PHYSICAL EDUCATION

College parallel students must complete two years of physical education to qualify for an associate degree at graduation. This program will be arranged to meet the interest and needs of the students, with emphasis on physical fitness and carryover activities.

Technology and vocational majors may elect physical education.

The College will sponsor intramural athletics and recreational activities for men and women as the need develops.

In so far as possible within budget limits and college policy a moderate program of intercollegiate sports will be scheduled. The College subscribes to the belief that a moderate athletics program will contribute to college life and develop esprit de corps among students, faculty and alumni.

STUDENT CONDUCT

The conduct of college students, both in and out of school, is expected to be that of any respectable adult in a public place. Students should consider at all times that the reputation of the institution depends in no small part upon their behavior. No long list of regulations and penalties should be necessary if each student abides by the rules of common courtesy and cooperation. The college reserves the right to dismiss any student who in its judgment conducts himself in a manner incompatible with the purposes of the college.

FRESHMAN ORIENTATION

The college will hold a freshman orientation session during the week preceding the opening of school in the fall. The purpose of the orientation program is to introduce the student to his new environment and to acquaint him with the policies of the college. Every student is assigned a faculty adviser whose advice and counsel is available to him throughout his college career.

All entering students must attend the orientation program scheduled during the first quarter. At these sessions the College program, activities, regulations, opportunities, and services will be explained to students. Tests for guidance and placement may be scheduled by the counseling staff.

GUIDANCE

Guidance of the student begins with the admissions interview. Immediately after registration, students meet with the faculty in their major course of study for an orientation to the entire curriculum. Each student is assigned to a faculty adviser who helps him select his courses in subsequent quarters. Students are invited to discuss their personal and classroom problems, as well as their educational and vocational plans with any member of the college staff, as well as with the office of Student Personnel. The Student Personnel office helps students in all matters pertaining to transfer.

Students who need specialized, individual counseling service beyond that provided by faculty advisers may be referred to the Student Personnel office. Students are invited to use the center for help in reading difficulties.

CO-CURRICULAR ACTIVITIES

The College recognizes that a well-balanced education program provides some time for social, cultural, and recreational activities. The office of the Dean of Student Personnel coordinates this aspect of college life. The Student Government Association is composed of all full-time students.

Members to Student Government Council are elected from various curriculums. The purpose of the Student Government Association shall be to provide means for responsible student participation in the entire program of student affairs.

FINANCIAL AID

A limited number of scholarships are available at the present time; however, more student aid is expected in the near future. Students desiring such aid should make this known when filing application for admission. High School guidance counselors should be consulted for additional information. Veteran benefits will be handled through Dean of Student Personnel Office.

SCHOLARSHIPS

Surry Community College Foundation, Inc., was formed in 1966 under the guidance of the college trustees. Through the efforts of the directors this non-profit organization contributors are solicited to aid students financially. Financial aid is made possible by business

firms and individuals who have contributed funds to the College Foundation.

Current scholarship contributors are:

From the Dobson area — Copeland Ruritan Club, Dobson Jaycees, Dobson Woman's Club, the Northwestern Bank. Circle K Club of Surry Community College.

From the Elkin area — Chatham Manufacturing Co., Elkin Woman's Club, Mrs. Richard G. Smith, Jr.

From the Mount Airy area — Alma W. Banner, Cockerham Printing Co., Joe A. Jackson, Jr., Robert E. Merritt, North Carolina Foam Industries, Mount Airy Kiwanis Club, Floyd Pike, Town and Country Construction Co., Floyd E. Rees, H. B. Rowe and Co., Inc., Workmen's Federal Savings and Loan Association.

OTHER FINANCIAL AID

The following area industries participate in a Tuition-Refund plan for employees who continue their studies at the college. Eligibility rules, reimbursement procedures, approved courses and other information concerning this type of financial aid should be referred to these current cooperating firms: Proctor-Silex Co., Mount Airy; R. J. Reynolds Tobacco Co., Winston-Salem; Sunbeam Corporation, Elkin.

WORK-STUDY PROGRAMS

Part-time jobs are available on campus for students wishing to earn a part of their expenses. Jobs are assigned by the Students Personnel office to those students who are most urgently in need of help. In the assignment of part-time jobs, consideration is given to such factors as scholarship, financial need, and willingness to work.

STUDENT INSURANCE

A low-cost student insurance plan is required for all full-time students. Part-time students are urged to take this insurance. All students participating in intercollegiate athletics, physical education, intramural sports, science or vocational laboratories are required to have accident insurance coverage.

MEDICAL FACILITIES

The college does not provide medical facilities; however, first-aid equipment is readily available in various areas of the campus. In case of accidents or serious illness the parents are notified immediately. Emergency treatment, by private physician or hospitalization, is at the student's expense.

STUDENT HOUSING

Students who desire temporary living accommodations in the vicinity of the College are responsible for making their own arrangements to secure housing. The College will render limited assistance

when possible in aiding students to make adequate preparation for accommodations.

The College maintains no facilities for the housing of students.

FOOD SERVICES

The College snack bar will provide light lunches and snacks throughout each day of operation. Schedules of hours will be posted.

JOB PLACEMENT

The Placement Office of the College is located in the Student Personnel office under an experienced full-time job counselor. College is a "full-time job." Therefore, the Job Placement Office advises students in the following categories not to hold part-time jobs: full-time students who are in their first quarter, those who are on academic probation, and those who have health problems. Within these limitations, students are invited to register for part-time and graduates for full-time employment, and both for counseling on career plans.

STUDENT ACTIVITY FEE

A student activity fee will be charged each full- and part-time student. The proceeds of this fee will remain in the College and will be budgeted cooperatively by students and faculty in support of non-curricular educational activities. These activities will include such functions as publications, speakers, artists, debate, drama and athletics.

BOOKS AND SUPPLIES

It will be the responsibility of each student to secure those textbooks and other supplies which may be required. Since those items may be used on the first day of classes, they should be purchased on the day of registration. The College Bookstore will be open during the hours of registration and at specified times thereafter.

OFFICIAL TRANSCRIPTS

Upon request of the student, an official transcript of his record at Surry Community College will be sent to any college or university, or to the student.

Each student is entitled to one official transcript of his work at no cost, provided all accounts with the College have been settled satisfactory. A fee of $1.00 is charged for each additional transcript.

TUITION DEPOSIT (Application Fee $10.00)

This deposit is paid at the time of applying for admission and is applied toward the tuition fee at the time of registration.

TUITION, FEES, AND OTHER EXPENSES

Tuition is set by the State Board of Education and is subject to change without notice.

All charges for tuition and fees are due and payable on the day of registration for classes. Checks and money orders should be made payable to Surry Community College.

REGISTRATION

The college operates on a quarter system. One unit of credit is equal to one class hour meeting per week. Each quarter will be between eleven and twelve weeks in length. Students pursuing an organized program of study must register and pay all tuition fees at the beginning of each quarter.

COLLEGE FEE SCHEDULE

Tuition Charges	College Parallel Courses	Technical and Vocational Courses
Application Deposit Fee (Effective September 1, 1968)	$10.00	$10.00
State resident, full time, 15 hrs.; per quarter	42.00	32.00
State resident, part time, less than 15 hrs.; per quarter hour	3.00	2.50
Out-of-State resident, full time, 15 hrs.; per quarter	105.00	80.00
Out-of-state resident, part time, less than 15 hrs.; per quarter hr.	7.50	6.25
Advance application payment fee (required from full time students following acceptance) will apply to tuition. (Non-refundable)	15.00	15.00
Activities fee, payable at registration, per quarter (Full time students	6.00	6.00
(Part time students)	3.00	3.00
Late registration fee (paid in addition to registration fee) Full time	5.00	5.00
Late registration fee (paid in addition to registration fee) Part time	2.00	2.00
Transcript fee (no charge for first copy)	1.00	1.00
Graduation fee	10.00	10.00

Student Insurance Fee—full time students—cost to be determined (will provide coverage for medical care arising out of injury)

Cost of books and supplies, while varying somewhat according to course of study will be approximately $80 per year.

REFUND POLICY

Students who must withdraw from a class or a program must arrange to talk with the Dean of Student Personnel. Tuition refund for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds (⅔) of the student's tuition may be refunded if the student withdraws within ten (10) calendar days after the first day of classes as published in the school calendar. Tuition refunds will not be considered for tuitions of five dollars ($5.00) or less. If a course or curriculum fails to materialize, all the tuition shall be refunded.

READMISSION REFUND

Where a student, having paid the required tuition and fees for a quarter, withdraws from the institution before the end of the quarter and the reasons for the withdrawal are found excusable by the institution's administration, the student may be allowed credit for unrefunded tuition and fees if he applies for re-admission during any of

the next four calendar quarters and petitions in writing to be allowed such credit.

VETERANS

Students enrolling at the Community College who wish to use educational benefits under one of the Government bills for veterans should make application to the local Veterans Administration Office. Correspondence obtained or certificates granted should be discussed with the Dean of Student Personnel prior to registration for classes.

Students in technical and vocational programs will not be classified as full-time students for benefits under the G. I. Bill unless technical students are enrolled for twenty-five clock hours per week and vocational students for thirty clock hours per week.

When in any quarter the total weekly contact hours listed are fewer than this, a student may enroll on request and with the approval of the institution for additional instructional hours to make up this shortage twenty-five hours per week in a technical curriculum or sufficient hours of attendance to make up thirty hours per week in a vocational trade curriculum.

REFUND POLICY FOR VETERANS

The following refund policy will be applicable to persons enrolled under provisions of Title 38, U. S. Code, as amended:

The institution has and maintains the following policy for the refund of the unused portion of tuition, fees, and other charges in the event the person fails to enter the course or withdraws or is discontinued therefrom at any time prior to completion:

The amount charged to the person for tuition, fees, and other charges for a portion of the course will not exceed the approximate pro rata portion of the tuition, fees, and other charges that the length of the completed portion of the course bears to its total length.

RESIDENCE

To qualify for tuition as a resident of North Carolina, a student 21 years of age or older must certify his legal residence for at least six months preceding the date of his first enrollment. The legal residence of a person under 21 years is that of his parents, or legal guardian.

COURSE LOAD

A degree or diploma student who is registered for at least 12 quarter hours is considered a full-time student. A student may register for up to 19 quarter hours of work. All above 19 hours must be approved by office of Student Personnel.

END-OF-QUARTER ACTIVITIES

The last two weeks of each quarter are reserved for completion of course work, review, and evaluation. Therefore, student extra-curricular and other activities which tend to interfere with these purposes are suspended during this period. Exceptions must be arranged with the Dean of Student Personnel.

WITHDRAWAL

A student who withdraws is expected to confer with his adviser and clear through the Registrar and the Business Office. Failure to withdraw officially results in automatic assignment of an "F" grade for the work attempted.

When a student withdraws officially before the end of the eighth week, a grade of WP or WF is assigned, depending on whether the work is passing or failing to that date. After eight weeks an F is recorded.

CHANGE IN CURRICULUM

There are times when a student's aptitude and interests may be better served by a change in program. Should a change be advisable the adviser should be consulted to explore possibilities which will serve the interests of the student.

If a change is recommended, final approval must be obtained from the divisional or departmental chairman.

AUDITING COURSES

The auditing of courses is permitted by special arrangement of the Academic Dean and of the instructor involved. Regularly enrolled students may audit courses. Tuition and fees are the same as required credit courses. Part-time students may arrange to take courses and pay all required fees. Auditors receive no credit.

ACADEMIC REGULATIONS

A student may be placed on probation, suspended, or dismissed if he fails to do satisfactory academic work or if he willfully abuses College regulations.

A student must maintain a C.Q.P.A. of 2.0 or better to be in good academic standing. Students who fail to do so are placed on probation, suspended or dismissed.

Student progress is measured by Quality Point Average, or Q.P.A.; the quality of work a student has done at the College through one or more quarters is reflected by his Cumulative Point Average, or C.P.A.

The Quality Point Average is calculated as follows:

1. Allowing 4 points for an A, 3 points for a B, 2 points for a C, 1 point for a D, and O points for an F, multiply the number of

points equivalent to the letter grade received in each course by the number of credit hours for the course to arrive at the quality points earned in each course.

2. Divide the sum of the quality points by the total number of credit hours of work; the quotient represents the Quality Points Average for the quarter.

The Cumulative Point Average is determined in the same manner as the Quality Point Average, except that all of the student's work at the College is taken into account.

ACADEMIC PROBATION

Any student whose cumulative quality point average is below 2.0 is doing less than satisfactory academic work and will be subject to review by the Student Personnel office.

A student making less than 1.5 quality point average following two consecutive quarters is placed on academic probation at which time he is required to consult a counselor.

SYSTEM OF GRADING

The following grading system is used at Surry Community College:

Letter	Numerical Equivalent	Description	Quality Points
A	93-100	Superior	4
B	85-92	Good	3
C	77-84	Average	2
D	70-76	Passing	1
F	Below 70	Failing	0
I	Incomplete		0
WP	Withdrawn, passing		0
WF	Withdrawn, failing		0

DEAN'S LIST

The Dean's List is designed to recognize all students whose academic performance is outstanding.

In order to qualify for the Dean's List, a student must carry at least twelve (12) quarter hours of credit work, maintain a 3.0 quality point average, and have no grade below a C during the quarter.

The Deans' List is published at the end of each quarter.

TRANSFER OF CREDIT

Courses taken at Surry Community College should transfer in grade and credit to the receiving institution as applicable to the curriculum for which such courses were intended. After completing two years of credit work at Surry Community College, the student should be able to transfer with junior status provided his program parallels

the pattern of the senior institution. Counselors will assist the student in course selection; however, it is the student's responsibility to familiarize himself with the catalog of the senior institution to which he will transfer.

GRADUATION REQUIREMENTS

Surry Community College grants two degrees, the Associate in Arts Degree for students who complete a College Transfer Program, the Associate in Applied Science Degree for students who complete a two-year Technical program, and a vocational diploma for one-year vocational students. All degree candidates must complete the General Education requirements, applicable to their respective programs in addition to other courses for a minimum of 96 quarter hours, 30 of which must be taken at Surry Community College. The student's overall grade point average must be at least 2.0 ("C") on work attempted at Surry Community College.

COMMENCEMENT

Exercises to award degrees and diplomas are held at the end of the Spring and Summer Quarter. The commencement daate is listed in the college calendar elsewhere in this catalog.

Candidates for degrees or diplomas are expected to attend commencement exercises. It is the responsibility of each student to apply to the Student Personnel Office for his degree or certificate at the beginning of the last quarter prior to his program completion. The $10 graduation fee must be paid at this time.

GENERAL ADULT AND CONTINUING EDUCATION

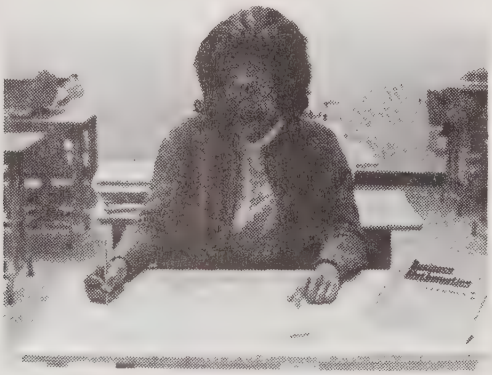
This division uses off-campus public school facilities as well as campus facilities at night in providing a variety of educational opportunities especially planned to meet the needs of adults and out-of-school youths 18 years of age and over. Classes offered, however, are not for college credit. Opportunities are available for adults to obtain pre-high school and high school credit classes, home and family courses, and general interest subjects. Students who desire help in arranging a program should consult the Director of Adult and Continuing Education.

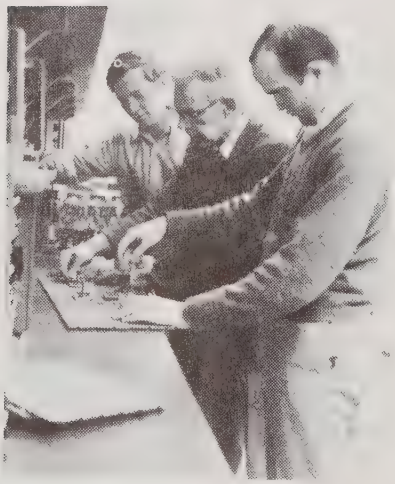
ADULT EXTENSION

Vocational-technical extension courses are part-time courses which do not lead to a diploma or degree, but may qualify for a certificate of completion. Enrollees normally attend training classes to improve competencies, increase skills and understanding. Business firms and industrial companies cooperate with the College Extension Division in offering courses to meet community needs. Classes are held in various county locations.

EVENING DIVISION

The College operates an Evening Division for students and adults interested in pursuing a part-time program. College parallel, technical, and vocational courses are available to qualified students. Classes usually meet one night a week from 7:00 to 10:00 p.m. Evening Division bulletins are available in the College office. Interested students should contact Director of Evening Programs.





COLLEGE PARALLEL DIVISION

College Parallel Studies (Associate in Arts Degree)

In the first two years of college students pursue a program of general education in the areas of humanities, social studies, science, and mathematics. In addition to areas mentioned above, students begin to specialize in work in their own particular fields of interest. Surry Community College provides quality instruction in these areas for transfer credit to senior institutions. The College also provides counseling to help students plan their program for transfer to the college or university of their choice. The student should consult the general regulations relative to admission requirements which apply to all students seeking admission to this College.

SUGGESTED
LIBERAL ARTS PROGRAM

First Year	**Quarter Hours**
English 101 - 102 - 103	9
History 101 - 102 - 103	9
Science Sequence (Biology, Chemistry or Physics)	12
Mathematics 105 - 106 or 101 - 102 - 103	9-10
Physical Education 101 - 102 - 103	3
Electives	5-6
	47-49
Second Year	
English 201 - 202 - 203	9
Social Science Electives	6
Humanities	3
Physical Education 201 - 202 - 203	3
Electives	27
	48

NOTES

1. Foreign language recommended for those students transferring to liberal arts institutions.

SUGGESTED
PRE-ENGINEERING PROGRAM

First Year	**Quarter Hours**
English 101 - 102 - 103	9
History 101 - 102 - 103	9
Chemistry 101 - 102 - 103	12
Mathematics (Analytic Geometry, Cal. Sequence)	15
Physical Education 101 - 102 - 103	3
	48

Second Year	
English 201 - 202	6
Physics 201 - 202 - 203	12
English Graphics I - II	6
Calculus III, Mathematics	5
Differential Equations, Mathematics	5
Economics 201 - 202 - 203	9
Physical Education 201 - 202 - 203	3
Electives	3
	49

NOTES:

1. Students should confer with adviser in planning program of studies.
2. This program is based on the assumption that pre-engineering students will offer four years of high school credits in mathematics. Any deficiency must be removed before above sequence is followed if junior standing in a four-year institution is desired.
3. Students deficient in high school foreign language credits must include prescribed number of credit hours in above program.

SUGGESTED
EDUCATION PROGRAM

This transfer program should be planned with the help of the student personnel office. The program selected should be designed to satisfy the requirements of most teacher training senior institutions. The suggested pattern of courses will meet most of the requirements for transfer at the junior level.

First Year	Quarter Hours
English 101, 102, 103	9
History 101, 102, 103	9
Mathematics 101, 102, 103	9
Natural Sciences:	
Biology, Chemistry or Physics	12
Foreign language or Elective	6-9
Physical Education 101, 102, 103	3
	48-51

Second Year	
English 201, 202, 203	9
History 201, 202, 203	9
Education 201, 202	6
Speech 101	3
Natural Science:	
Biology, Chemistry or Physics	9-12
Psychology 101, 102	6
Physical Education 201, 202, 203	3
Electives	6
	51-54

SUGGESTED
BUSINESS ADMINISTRATION PROGRAM

First Year	Quarter Hours
English 101 - 102 - 103	9
Science Sequence:	
Biology, Chemistry or Physics	12
Mathematics 101 - 102 - 103 or 105 - 106	9-10
Social Science 101 - 102 - 103	9
Physical Education 101 - 102 - 103	3
Electives	5-6
	47-49

Second Year	
English 201 - 202	6
Social Science Electives	5-6
Economics 201 - 202 - 203	9
Accounting 131 - 132 - 133	9
Speech 101	3
Introduction to Business	3
Physical Education 201 - 202 - 203	3
Electives	5-10
	43-49

NOTES:

1. Foreign language recommended for those students transferring to liberal arts institutions.

SUGGESTED
TEACHER AIDE PROGRAM

This program is designed for students who desire a basic liberal arts curriculum with a vocational option. With careful planning, this program should enable a student to transfer into a four-year college or to seek employment as a teacher aide, kindergarten supervisor, or nursery supervisor. Any student entering this curriculum should work closely with a counselor or faculty adviser to assure his taking courses most related to his interest and needs.

First Year	**Quarter Hours**
English 101, 102, 103	9
Psychology 101, 102	6
Mathematics 101, 102, 103	9
Education 201, 202	6
*Education 203 (Seminar)	3
Art 130, 131, 132 or Typing, Office Machines, Speech	9
Physical Education 205 (Health)	3
Electives	3
	48

Second Year	
Music 101, 102, 103	9
Sociology 201, 202	6
Physical Education 101, 102, 103	3
Biology 101, 102, 103 or other Science sequence	12
Social Science 101, 102, 103	9
Philosophy 201	3
*Education 204, Teacher Aide Internship	6
	48

*Courses to be jointly organized and administered by college and advisory committee.

COLLEGE TECHNICAL DIVISION

(Associate In Applied Science Degree)

The programs in the technology areas are designed to prepare students with technical competence for immediate employment in either business, industry, government, the health occupations fields, or as owner-manager of their firms. General education subjects are included as necessary adjuncts to these occupational programs.

The student should thoroughly understand that technical programs are not intended to transfer later to senior colleges. Upon successful completion of a technical program of study, the Associate Degree in Applied Science is awarded.

Programs of Study

Business Options:

General Business Management

Executive Secretarial

Medical Secretarial

Legal Secretarial

Agricultural Business

Technology Options:

Electronics Technology

Drafting and Design Technology

Martin Memorial Nursing Program

GENERAL BUSINESS MANAGEMENT

The General Business Management Curriculum is designed to prepare the student for employment in one of many occupations common to business. Training is aimed at preparing the student in many phases of administrative work that might be encountered in the average business.

The graduate of the Business Management Curriculum may enter a variety of career opportunities from beginning sales person or office clerk to manager trainee. The duties and responsibilities might include: making up and filing reports, tabulating and posting data in various books, sending out bills, checking calculations, adjusting complaints, operating various office machines, and assisting managers in supervising. Positions are available in business such as advertising, banking, credit, finance, retailing, wholesaling, tourist, and travel industry, insurance, transportation and communication.

GENERAL BUSINESS MANAGEMENT

First Quarter		Lec.	Lab.	Credit
ENG 101	English 1	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 105	Business Mathematics	3	0	3
ECO 201	Economics I	3	0	3
BUS 115	Business Law I	3	0	3
		14	3	15
Second Quarter				
ENG 102	English II	3	0	3
ECO 202	Economics II	3	0	3
BUS 116	Business Law II	3	0	3
BUS 101	Introduction to Business	3	0	3
BUS 110	Office Machines I	2	2	3
BUS 131	Accounting I	2	3	3
		16	5	18
Third Quarter				
ENG 103	English III	3	0	3
BUS 117	Business Law III	3	0	3
PSY 110	Human Relations in Management	3	0	3
BUS 123	Business Finance or Elective	3	0	3
BUS 132	Accounting II	2	3	3
BUS 239	Marketing	3	0	3
		17	3	18
Fourth Quarter				
SPEECH 101	Fundamentals of Speech	3	0	3
BUS 133	Accounting III	2	3	3
EDP 104	Introduction to Data Processing	3	2	4
BUS 273	Elements of Retailing or Elective	3	0	3
	Social Science Elective	3	0	3
		14	0	3
Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 243	Advertising or Elective	3	0	3
BUS 235	Business Management	3	0	3
BUS 250	Cost Accounting	2	3	3
	Social Science Elective	3	0	3
		14	3	15
Sixth Quarter				
BUS 229	Taxes	2	3	3
BUS 272	Principles of Supervision	3	0	3
BUS 271	Office Management	3	0	3
BUS 275	Principles of Insurance	3	0	3
	Elective	3	0	3
		14	3	15
	TOTAL CREDIT HOURS			97

SECRETARIAL PROGRAMS

The demand for qualified secretaries in our ever-expanding business world is becoming more acute. The purpose of this curriculum is to outline a program that will provide training in the accepted procedures required by business and industry.

The secretarial curriculums are designed to offer the students the necessary secretarial skills in typing, dictation, transcription, and terminology for employment. The special training in secretarial subjects is supplemented by related courses in mathematics, accounting, business law, and personality development.

Executive Secretary

The graduate executive secretary should have a knowledge of business terminology, skill in dictation, and accurate transcription of business letters and reports. The graduate may be employed as a stenographer or as a secretary. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, or reports. The secretary, in addition to taking dictation and transcribing, is given more responsibility in connection with meeting office callers, screening telephone calls, and being an assistant to an executive. She may enter a secretarial position in a variety of offices in businesses, such as insurance companies, banks, marketing institutions, and financial firms.

Legal Secretary

The graduate legal secretary should have a knowledge of legal terminology, skill in dictation, and accurate transcription of legal records, reports, and documents. The duties of a legal secretary may consist of taking dictation and transcribing letters, memoranda and reports, meeting office callers and screening telephone calls, filing, and scheduling appointments. A variety of secretarial positions in lawyers' offices and federal and state government offices are open to the graduate legal secretary.

Medical Secretary

The graduate medical secretary should have a knowledge of medical terminology, skill in dictation and accurate transcription of medical records, reports, and letters. The duties of a medical secretary may consist of taking dictation and transcribing letters, memoranda and reports, meeting office callers and screening telephone calls, filing, and scheduling appointments. Open to the graduate are a variety of secretarial positions such as those in physicians' offices, private and public hospitals, federal and state health programs, and the drug and pharmaceutical industry.

EXECUTIVE — SECRETARIAL

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 105	Business Mathematics	3	0	3
BUS 115	Business Law I	3	0	3
		14	5	16
Second Quarter				
ENG 102	English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 107	Shorthand II	3	2	4
BUS 131S	Secretarial Accounting I	2	3	3
BUS 101	Introduction to Business	3	0	3
		13	8	16
Third Quarter				
ENG 103	English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 108	Shorthand III	3	2	4
BUS 132S	Secretarial Accounting II	2	3	3
EDP 104	Introduction to Data Processing	3	2	4
		13	10	17
Fourth Quarter				
SPEECH 101	Fundamentals of Speech I	3	0	3
BUS 206E	Dictation and Transcription	3	2	4
BUS 205	Advanced Typewriting	2	3	3
BUS 110	Office Machines I	2	2	3
	Electives	5	0	5
		15	7	18
Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 207E	Dictation and Transcription	3	2	4
BUS 214	Secretarial Procedures	3	2	4
BUS 211	Office Machines II	2	2	3
	Elective	3	0	3
		14	6	17
Sixth Quarter				
BUS 208E	Dictation and Transcription	3	2	4
BUS 206	Production Typing	2	3	3
BUS 215E	Office Application	12	3	6
	Social Science Elective	3	0	3
		20	8	16
	TOTAL CREDIT HOURS			100

MEDICAL SECRETARIAL

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 105	Business Mathematics	3	0	3
BUS 115	Business Law I	3	0	3
		14	5	16
Second Quarter				
ENG 102	English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 107	Shorthand II	3	2	4
BUS 131S	Secretarial Accounting I	2	3	3
BUS 101	Introduction to Business	3	0	3
		13	8	16
Third Quarter				
ENG 103	English III	3	0	0
BUS 104	Typewriting III	2	3	3
BUS 108	Shorthand III	3	2	4
BUS 132S	Secretarial Accounting II	2	3	3
BUS 180M	Medical Terminology & Vocabulary	3	0	3
Phy Ed 205	Personal and Community Hygiene	3	3	3
		16	8	19
Fourth Quarter				
SPEECH 101	Fundamentals of Speech	3	0	3
BUS 206M	Dictation & Transcription (Medical)	3	2	4
BUS 280M	Terminology & Vocabulary (Med.)	3	0	3
BUS 205	Advanced Typewriting	2	3	3
BUS 110	Office Machines I	2	2	3
		13	7	16
Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 207M	Dictation & Transcription (Medical)	3	2	4
BUS 214M	Secretarial Procedures (Medical)	3	0	3
BUS 211	Office Machines II	2	2	3
	Elective	3	0	3
		14	4	16
Sixth Quarter				
BUS 208M	Dictation & Transcription (Medical)	3	2	4
BUS 206	Production Typewriting	2	3	3
BUS 215M	Office Application	3	12	6
	Elective (Psychology or Sociology)	3	0	3
		11	17	16

LEGAL SECRETARIAL

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 105	Business Mathematics	3	0	3
BUS 115	Business Law I	3	0	3
		14	5	16
Second Quarter				
ENG 102	English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 107	Shorthand II	2	2	1
BUS 131-S	Secretarial Accounting I	2	3	3
BUS 116	Business Law II	3	0	3
		13	8	16
Third Quarter				
ENG 103	English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 108	Shorthand III	3	2	1
BUS 132-S	Secretarial Accounting II	2	3	3
BUS 117	Business Law III	3	0	3
		13	8	16
Fourth Quarter				
SPEECH 101	Fundamentals of Speech I	3	0	3
BUS 206-L	Dictation and Transcription (Legal)	3	2	4
BUS 206	Advanced Typewriting	2	3	3
BUS 110	Office Machines I	2	2	3
EDP 104	Introduction to Data Processing	3	2	4
	Elective	3	0	3
		16	9	20
Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 207-L	Dictation and Transcription (Legal)	3	2	4
BUS 214-L	Secretarial Procedures (Legal)	3	0	3
BUS 211-L	Office Machines — Stenoprint Mach.	2	2	3
	Elective	3	0	3
Sixth Quarter				
BUS 208-L	Dictation and Transcription (Legal)	3	2	4
BUS 206	Production Typing	2	3	3
BUS 215-L	Office Application	3	12	6
	Elective	3	0	3
		11	17	16
	TOTAL CREDIT HOURS			102

AGRICULTURAL BUSINESS TECHNOLOGY

Agriculture in the United States is undergoing major changes. A highly effective production machine, coupled with technological advances, is constantly eliminating the unprepared, the under capitalized and less efficient. These changes have given rise to the need for more technically trained people. The agricultural business curriculum combines studies in agriculture with intensive business training to prepare young men and women for the many and varied fields of employment in business and industry allied with agriculture.

Successful completion of this program should enable an individual to find employment in such areas as plant supervision, management of farm supply stores, farm chemical supplies, field servicemen, inspection of farm products, office management, farm product marketing, farm management and agricultural research.

AGRICULTURE BUSINESS TECHNOLOGY

First Quarter		**Lec.**	**Lab**	**Credit**
ENG 101	English I	3	0	3
AGR 125	Animal Science	3	2	4
BUS 105	Business Mathematics	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 115	Business Law I	3	0	3
		14	5	16
Second Quarter				
ENG 102	English II	3	0	3
AGR 185	Soil Science	3	2	4
BUS 131	Accounting I	2	3	3
BUS 110	Office Machines 1	2	2	3
BUS 101	Introduction to Business	3	0	3
BUS 116	Business Law II	3	0	3
		16	7	19
Third Quarter				
ENG 103	English III	3	0	3
AGR 104	Introduction to Agricultural Economics	3	0	3
BUS 132	Accounting II	2	3	3
AGR 170	Plant Science	3	2	4
BUS 123	Business Finance or Elective	3	0	3
		14	5	16

Fourth Quarter				
SPEECH 101	Fundamentals of Speech	3	0	3
AGR 204	Farm Business Management	3	0	3
AGR 271	Field Crops	3	0	3
AGR 222	*Agricultural Construction	3	2	4
EDP 104	*Introduction to Data Processing	3	2	4
BUS 273	*Elements of Retailing	3	0	3
		15	4	16

*Student may elect any combination of these totaling a minimum of 7 hours.

Fifth Quarter				
ENG 206	Business Communications	3	0	3
AGR 205	Agricultural Marketing	3	0	3
AGR 201	Agricultural Chemicals	3	2	4
AGR 218	Agricultural Mechanization	3	0	3
		15	5	17

Sixth Quarter				
BUS 229	Taxes	3	2	4
AGR 228	Livestock Diseases and Parasites	3	2	4
AGR 272	Tobacco Technology	3	0	3
AGR 180	General Poultry Science	3	0	3
		15	6	18

Students entered—1968 Freshmen will require 100 Q hours to graduate and must take required course of program entered Freshman year.

Students entered—1969 Freshmen will require 102 hours to graduate.

ELECTRONICS TECHNOLOGY

The field of electronics has developed at a rapid pace since the turn of the century. Developments in the field of electronic controls and the demands for new products in the consumer market have revolutionized the industry.

Many opportunities exist for men and women with a technical education. This curriculum provides a basic background in electronic theory and practical applications of electronics for business and industry. Graduates are capable of handling a variety of positions that involve the operation, design, research, testing and sale of electronic equipment.

Sample job titles are: Communications Systems Engineer, Customer Service Engineer, Electronic Field Engineer, Junior Engineer, Technical Aide, Engineering Aide, Technical Sales Representative, Computer Technician, Technical Writer.

The courses in this curriculum are not designed for transfer to a senior college or university, but may be acceptable in some engineering schools.

Applicants for the Electronics Technology program should have a strong background in English, mathematics, and science, and should have demonstrated good performance in these and other subjects.

ELECTRONICS TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
MAT 110	Technical Mathematics I	5	0	5
PHY 101	Physics, Properties of Matter	3	2	4
DFT 101	Technical Drafting I	0	6*	2
ELC 101	Fundamentals of Electricity I	4	4-6	6
		15	12-14	20
Second Quarter				
ENG 102	English II	3	0	3
MAT 111	Technical Mathematics II	5	0	5
PHY 102	Physics: Work, Energy, Power	3	2	4
ELC 102	Fundamentals of Electricity II	4	4-6	6
	Elective			3
		15	6-8	21
Third Quarter				
ENG 103	English III	3	0	3
MAT 112	Technical Mathematics III	5	0	5
ELN 101	Electronic Instruments and Measurements	1	4-6	3
ELN 105	Control Devices	5	4-6	7
		14	8-12	18
Fourth Quarter				
SPEECH 201	Fundamentals of Speech I	3	0	3
MAT 201	Technical Mathematics IV	5	0	5
PHY 104	Physics: Light and Sound	3	2	4
ELN 205	Applications of Vacuum Tubes and Transistors	5	4-6	7
		16	6-8	19
Fifth Quarter				
	Social Science Elective	3	0	3
ELN 210	Semiconductor Circuit Analysis	5	2-3	6
ELN 214	Wave Shaping and Pulse Circuits	2	2-3	3
DFT 104	Electronic Drafting	2	3	3
		12	7-9	15
Sixth Quarter				
	Social Science Elective	3	0	3
ELN 215	Wave Shaping and Pulse Circuits	2	2-3	3
ELN 220	Electronic Systems	5	4-6	7
	Elective			3
		10	6-9	16

* "Manipulative laboratory" involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

DRAFTING AND DESIGN — MECHANICAL

This curriculum has been designed to train persons to obtain employment and to enable the individual student to develop a high proficiency after employment in the industry. Because technicians associate with administrative personnel, scientists, engineers, and skilled workmen, courses in general education have been included. Courses containing essential information from related areas, such as mathematics, physics, and mechanics are also necessary and have been included to provide the student with an academic foundation for his training.

Mechanical drafting and design technicians are concerned with the preparation of drawings for design proposals, for experimental models and items for production use.

These technicians perform many aspects of drafting in a specialized field, such as the developing of the drawing of a section, subassembly of major component. Investigating design factors and availability of material and equipment, production methods and facilities are frequent assignments. They assist in the design of units and controls from specifications by utilizing drawings of existing units and reports on functional performance. They may draw components in industrial fields based on engineers' original design concepts or specific ideas. Also, they may be assigned as coordinators for the execution of related work of other design, production, tooling, material and planning groups. Technicians with experience in this classification may often supervise the preparation of working drawings.

These technicians are employed in many types of manufacturing, fabrication, research, development and service industries. Substantial numbers also are employed in communications, transportation, public utilities, consulting engineering firms, and federal, state, and local governments.

Applicants for the Drafting and Design program should have a strong background in English, mathematics, and science, and should have demonstrated good performance in these subjects.

DRAFTING AND DESIGN TECHNOLOGY (MECHANICAL)

First Quarter		**Lec.**	**Lab.**	**Credit**
ENG 101	English I	3	0	3
MAT 110	Technical Mathematics I	5	0	5
PHY 101	Physics: Properties of Matter	3	2	4
DFT 101	Technical Drafting I	0	6	2
MEC 101	Machine Processes I	0	6	2
		11	14	16
Second Quarter				
ENG 102	English II	3	0	3
MAT 111	Technical Mathematics II	5	0	5

PHY 102	Physics: Work, Energy, Power	3	2	4
DFT 102	Technical Drafting II	0	6	2
MEC 102	Machine Processes II	0	6	2
		11	14	16

Third Quarter

ENG 103	English III	3	0	3
MAT 103	Technical Mathematics III	5	0	5
PHY 103	Physics: Electricity	3	2	4
PHY 106	Applied Mechanics	5	0	5
DFT 103	Technical Drafting III	0	6*	2
		16	8	19

Fourth Quarter

SPEECH 101	Fundamentals of Speech I	3	0	3
DFT 201	Technical Drafting IV	2	6	4
DFT 204	Descriptive Geometry	2	4	4
MEC 205	Strength of Materials	3	2	4
MEC 210	Physical Metallurgy	3	3	4
		13	15	19

Fifth Quarter

	Social Science Elective	3	0	3
DFT 205	Design Drafting I	2	6	4
DFT 211	Mechanisms	3	2	4
MEC 211	Physical Metallurgy	3	3*	4
	Elective	4	0	4
		15	11	19

Sixth Quarter

	Social Science Elective	3	0	3
DFT 206	Design Drafting II	2	6*	4
MEC 235	Hydraulics and Pneumatics	3	3	4
	Elective	3	0	3
DFT 212	Jig and Fixture Design	2	4	4
		13	13	18

MARTIN MEMORIAL NURSING PROGRAM

The great increase of knowledge affecting health practices, the population growth, and the public demand for more health care are the basis of statistics documenting the ever-increasing need for nursing personnel.

The program at Surry Community College combines a curriculum of nursing education and general education on the campus with selected learning experiences at hospitals, doctors' offices and other community health agencies under the direction of the College nursing faculty. The curriculum provides preparation for technical nursing. Graduates will be qualified to take the Registered Nurse examination in North Carolina. The curriculum prepares the graduates to give direct patient-centered nursing care under the supervision of a professional registered nurse as beginning level practitioners.

The program encourages the students to progress to their fullest potentials as individuals, nurses, and citizens of their communities.

An interview with the chairman of the nursing faculty and/or a designated nursing faculty member and further testing on a need basis will be required for admission to the nursing curriculum. Evidence of mental and physical health must be submitted on required medical and dental records not earlier than July 1, and not later than August 15, prior to admission in the fall quarter. Qualified students will begin this curriculum only in the fall quarter. Eligible transfer students may be admitted other than the fall quarter.

PROPOSED ASSOCIATE DEGREE NURSING CURRICULUM

(Tentative for September, 1970)

FIRST YEAR

First Quarter

Freshman English I	3
Chemistry for Nurses	4
General Psychology I	3
Fundamentals of Nursing I	6
Orientation to College	1
Physical Education	1
	18

Second Quarter

Freshman English II	3
Human Anatomy and Physiology	4
Fundamentals of Nursing II	7
General Psychology II	3
Physical Education	1
	18

Third Quarter

Freshman English III	3
Human Anatomy and Physiology	4
Child Growth and Development	3
Maternal and Child Care	7
Physical Education	1
	18

Fourth Quarter

Nursing Care in Physical/Mental Illness	7
Fundamentals of Speech	3
Introduction to Sociology	3
Elective	3-5
	16-18

Fifht Quarter

Nursing Care in Physical/Mental Illness	7
Nursing Seminar	3
Marriage and the Family	3
Nutrition	3
	19

Sixth Quarter

Nursing Care in Physical/Mental Illness	10
Humanities Elective	3-5
	13-15

VOCATIONAL DIVISION

(Diploma)

The recent growth of industry, with its rapid technological advances has created a greater need for skilled craftsmen. These craftsmen must acquire the technical knowledge of the occupation and be able to perform the necessary manipulative skills to successfully meet the increasing demands required of industry.

The objectives of the vocational programs at Surry Community College are to prepare individuals for initial employment in recognized skilled occupations, to re-train for entering new occupations, to advance in a given occupation by updating or upgrading of skills and knowledge, to develop an understanding of the American free enterprise system, and to develop an interest in the betterment of our society.

Vocational programs require one full year of participation for students on a full-time basis. Courses will be available during the day and during the evening for students desiring to enroll on a part-time basis.

The vocational programs are designed to prepare the graduate to enter and make progress in a skilled occupation. Up-to-date instructional equipment is used in classroom, laboratory, and shop activities. Included in the programs of study is instruction in related and applied general education subjects with a concentration of study in technical subjects and the development of manipulative skills.

PROGRAMS OF STUDY

The diploma is granted upon the successful completion of one of the following one-year programs:

Power Mechanics—Automotive
Welding
Carpentry—Cooperative
Electrical Installation and Maintenance

Admission to a Program

These programs are open to any high school graduate or person 18 years of age or over who shows promise of successfully completing the program. Students with deficiencies in subjects basic to the program may be required to complete supplementary studies at the College prior to entering the program on a full-time basis.

AUTOMOTIVE MECHANICS

This Curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair or adjust automotive vehicles. Manual skills are developed in practical shop work. Thorough understanding of the operating principles in-

volved in the modern automobile comes in class assignments, discussion, and shop practice.

Complexity in automotive vehicles increases each year because of scientific discovery and new engineering. These changes are reflected not only in passenger vehicles, but also in trucks, buses and a variety of gasoline-powered equipment. This curriculum provides a basis for the student to compare and adapt to new techniques for servicing and repair as vehicles are changed year by year.

Automobile mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas, they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the cause of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition. They use shop manuals and other technical publications.

Automotive mechanics in smaller shops usually are general mechanics qualified to perform a variety of repair jobs. A large number of automobile mechanics specialize in particular types of repair work. For example, some may specialize in repairing only power steering and power brakes, or automatic transmissions. Usually such specialists have an all-round knowledge of automotive repair and may occasionally be called upon to do other types of work.

AUTOMOTIVE MECHANICS

First Quarter		**Lec.**	**Lab.**	**Credits**
AUT 1111	Internal Combustion Engines	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
ENG 1101	Reading Improvement	2	0	2
PHY 1101	Applied Science I	3	2	4
		13	14	18
Second Quarter				
PMT 1112	Engine Electrical & Fuel Systems	5	12	9
ENG 1102	Communication Skills	3	0	3
DFT 1101	Schematics and Diagrams. Power Mechanics	0	3	1
PHY 1102	Applied Science II	3	2	4
		11	17	17
Third Quarter				
AUT 1123	Automotive Chassis and Suspension Systems	3	9	6
AUT 1121	Braking Systems	3	3	4
PSY 1101	Human Relations	3	0	3
AUT 1101	Automotive Air Conditioning	2	3	3
WLD 1101	Basic Gas Welding	0	3	1
		11	18	17

Fourth Quarter				
AUT 1124	Automotive Power Train Systems	3	9	6
AUT 1125	Automotive Servicing	3	9	6
BUS 1103	Small Business Operations	3	0	3
		9	18	15

WELDING

This curriculum was developed to fill the tremendous need for welders in North Carolina. Recently completed Manpower Survey shows quite clearly that many welders will be needed annually to fill present and projected vacancies in the State.

The content of this curriculum is designed to give students sound understanding of the principles, methods, techniques and skills essential for successful employment in the welding field and metals industry.

The field of welding offers a person prestige, security and a future of continuous employment with steady advancement. It offers employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, railroads, construction, pipe fitting, production shop, job shop and many others.

Welders join metals by applying intense heat, and sometimes pressure, to melt the edges to form a permanent bond. Closely related to welding is "oxygen cutting." Of the more than 35 different ways of welding metals, arc, gas, and resistance welding are the three most important.

The principal duty of the welder using manual techniques is to control the melting by directing the heat from either an electric arc or gas welding torch, and to add filler metal where necessary to complete the joint. He should possess a great deal of manipulative skill with a knowledge of jigs, welding symbols, mathematics, basic metallurgy, and blueprint reading.

WELDING

First Quarter		Lec.	Lab.	Credits
WLD 1120	Oxyacetylene Welding & Cutting	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
DFT 1104	Blueprint Reading: Mechanical	0	3	1
PHY 1101	Applied Science I	3	2	4
ENG 1101	Reading Improvement	2	0	2
		13	17	19
Second Quarter				
WLD 1121	Arc Welding	3	12	7
MAT 1103	Geometry	3	0	3

DFT 1117	Blueprint Reading: Welding	0	3	1
PHY 1102	Applied Science II	3	2	4
ENG 1102	Communication Skills	3	0	3
		12	17	18
Third Quarter				
WLD 1124	Pipe Welding	3	12	7
WLD 1123	Inert Gas Welding	1	3	2
WLD 1112	Mechanical Testing and Inspection	1	3	2
DFT 1118	Pattern Development and Sketching	0	3	1
PSY 1101	Human Relations	3	0	3
		8	21	15
Fourth Quarter				
WLD 1122	Commercial and Industrial Practices	3	9	6
WLD 1125	Certification Practices	3	6	5
MEC 1112	Machine Shop Processes	0	6	2
BUS 1105	Industrial Organizations	3	0	3
		9	21	16

BUILDING CONSTRUCTION TRADES
COOPERATIVE CARPENTRY

Carpentry is one of the basic trades in the construction field. Carpenters construct, erect, install, and repair structures of wood, plywood, and wallboard, using hand and powertools. The work must conform to local building codes for both residential and commercial structures.

This curriculum in carpentry is designed to train the individual to enter the trade with a background in both shop skills and related information. He must have a knowledge of mathematics, blueprint reading, methods of construction and a thorough knowledge of building materials.

The modern carpenter will work on new construction, maintenance, and repair of many types of structures, both residential and commercial. He should have an understanding of building materials, concrete form construction, rough framing, exterior trip, and the installation of cabinets and fixtures.

Most carpenters are employed by contractors in the building construction fields. When specializing in a particular phase of carpentry, the job is designated according to the specialty as lay-out carpenter, framing carpenter, concrete form carpenter, scaffolding carpenter, acoustical and insulating carpenter, and finish carpenter.

The carpenter constructs, erects, installs and repairs structures and fixtures of wood, plywood, wallboard and other materials, using

carpenters' handtools and powertools to conform to local building codes. He is required to use blueprints, sketches or building plans for information pertaining to type of material, dimensions, layout and design of structure, and method of construction.

COOPERATIVE CARPENTRY

This program prepares students for entry into the carpentry occupational field.

The students will alternate, one week in on-the-job training and one week in classroom and laboratory training.

The program consists of a minimum of 700 clock hours on the job and 600 clock hours of on-campus training.

A certificate is granted at the end of the 12-month program.

First Quarter		**Lec.**	**Lab.**	**Credit**
	On-the-job training—approximately 200 hours			10
	Classroom training:			
CARP 1101	Carpentry I	4	16	6
SAFETY 1101	Safety and First Aid	2	0	2
ENG 1101	Reading Improvement		0	2
				20
Second Quarter				
	On-the-job training—Approximately 200 hours			10
	Classroom training:			
CARP 1102	Carpentry II	4	16	6
DFT 1110	Blueprint Reading	0	3	1
ENG 1102	Communication Skills	3	0	3
				20
Third Quarter				
	On-the-job training—Approximately 100 hours			6
	Classroom training:			
CARP 1103	Carpentry III	4	16	6
MATH 1112	Applied Mathematics	3	0	3
PSY	Human Relations	3	0	3
				18
Fourth Quarter				
	On-the-job training—Approximately 200 hours			10
	Classroom training:			
CARP 1104	Carpentry IV	4	16	6
CARP 1110	Building Trades Survey	4	0	2
BUS 1103	Small Business operation	3	0	3
				21
	TOTAL CREDIT HOURS			79

BUILDING CONSTRUCTION TRADES
ELECTRICAL INSTALLATION & MAINTENANCE

The rapid expansion of the national economy and the increasing development of new electrical products is providing a growing need for qualified people to install and maintain electrical equipment. By mid-1960, more than 350,000 were employed as either construction electricians or maintenance electricians. Between 5,000 and 10,000 additional tradesmen are required each year to replace those leaving the industry. It is expected that the total requirements for electrical tradesmen will reach 500,000 by 1966 and 700,000 by 1970. The majority of the electrical tradesmen today are trained through apprenticeship or on-the-job training programs.

The curriculum guide will provide a training program in the basic knowledge, fundamentals, and practices involved in the electrical trades. A large portion of the program is devoted to laboratory and shop instruction which is designed to give the student practical knowledge and application experience in the fundamentals taught in class.

The graduate of the electrical trades program will be qualified to enter an electrical trade as an on-the-job trainee or apprentice, where he will assist in the planning, layout, installation, check out, and maintenance of systems in residential, commercial, or industrial plants. He will have an understanding of the fundamentals of the National Electrical Code regulations as related to wiring installations, electrical circuits, and the measurements of voltage, current power, and power factor of single and polyphase alternating circuits. He will have a basic knowledge of motor and motor control systems; industrial electronic control systems, business procedures, organization, and practices; communicative skills; and the necessary background to be able to advance through experience and additional training through up-grading courses offered in the center.

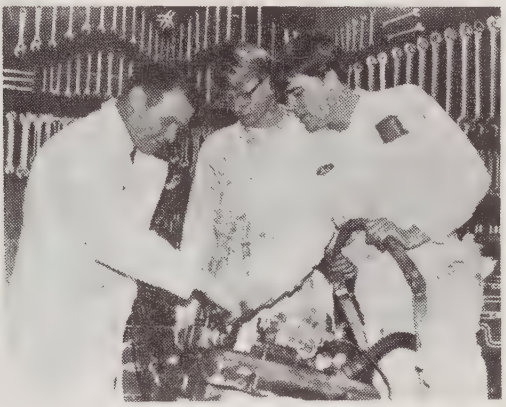
ELECTRICAL INSTALLATION & MAINTENANCE

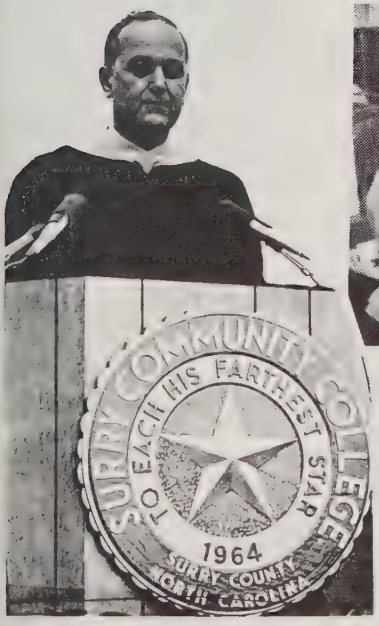
First Quarter		Lec.	Lab.	Credit
ELC 1112	Direct and Alternating Current	5	12	9
ENG 1101	Reading Improvement	2	0	2
MAT 1115	Electrical Math	5	0	5
PHY 1101	Applied Science I	3	2	4
		15	14	20

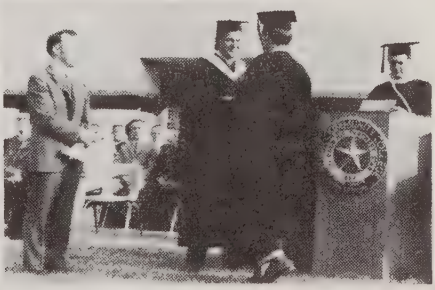
Second Quarter				
ELC 1113	Alternating Current and Direct Current Machines and Controls	5	12	9
DFT 1110	Blueprint Reading: Building Trades	0	3	1
ENG 1102	Communication Skills	3	0	3
PHY 1102	Applied Science II	3	2	4
		11	17	17

Third Quarter				
ELC 1124	Residential Wiring	5	9	8
ELN 1118	Industrial Electronics	3	6	5
PSY 1101	Human Relations	3	0	3
DFT 1113	Blueprint Reading: Electrical	0	3	1
		11	18	17

Fourth Quarter				
ELC 1125	Commercial and Industrial Wiring	5	12	9
ELN 1119	Industrial Electronics	3	6	5
BUS 1103	Small Business Operations	3	0	3
		11	18	17




SURRY COMMUNITY COLLEGE
TO REACH HIS FARTHEST STAR
1964
SURRY COUNTY
NORTH CAROLINA



ADULT AND CONTINUING EDUCATION

Surry Community College is committed to the continuing education of all the citizens in its area of service. To fulfill this commitment, the college offers a variety of courses, institutes, conferences, clinics, forums, demonstrations, workshops and exhibits designed to meet adult educational needs and interests.

Through the Adult and Continuing Education Center students find opportunities to retrain and update themselves in employment, develop leadership and civic responsibility, expand knowledge in general education, and develop creativity in the fine arts.

The Adult Education courses are offered when there is community need and interest. Some courses and services, because of great demand, are offered on a regular, continuing basis. Other courses and services may be initiated by requests from individuals and groups. Surry Community College cooperates with schools, libraries, colleges, health and welfare groups, civic clubs, community clubs, law enforcement agencies, fire service groups, and business and industrial groups to provide educational service for greater numbers of people.

General Information

CLASS LOCATIONS

Many continuing courses and services are provided on the College campus at Dobson. Other courses and services are provided in extension centers in the various communities of Surry and Yadkin Counties. New classes may be formed whenever a sufficient number of persons show interest in a particular area of study.

ADMISSION AND REGISTRATION

Any person eighteen years of age or older may be admitted to a continuing education class. In extenuating circumstances and upon the approval of the appropriate public school official, a person under eighteen years of age may be admitted to an adult education class.

Prior to the beginning of each quarter, a course schedule is made available to potential students.

Courses which begin between quarters are announced through local news media. Adults are encouraged to contact the College and pre-register prior to the beginning of each course. However, adults may register at the first class session if unable to register.

FEES

Fees vary with the type of educational program provided. Some programs such as adult basic education are supported primarily from state and federal funds and are free of student cost. Other programs such as business education are partially self-supporting through student fees. When such fees are necessary, they are announced in the course schedule and are paid at the first class session. Books and supplies are usually the responsibility of the student and may be purchased from the College Bookstore.

ATTENDANCE

Regular attendance and class participation are essential to effective teaching and learning. Adult students are expected to be regular and punctual in attendance. A minimum of 75 per cent student attendance is required to receive a certificate of completion.

Certificates: Adult Education Programs are designed primarily for personal growth and development; therefore, no degree credit is awarded. North Carolina High School Completion Certificates are awarded to students who complete successfully the Adult High School Program. For the successful completion of most other adult education programs, the student is awarded an Achievement Certificate.

PROGRAMS

Continuing Education Programs are offered in major program areas and through the Programmed Instructional Learning Laboratory. The major program areas are:

Adult High School, Public Service, Professional Inservice, Family Life, Cultural Enrichment, Business and Industrial Services and Community Services. The Programmed Instructional Laboratory makes an important contribution to each adult education program and to many other programs offered by Surry Community College.

Developmental Studies
Adult Basic Education (grades 1-8)

Adult High School

Public Service Programs
Law Enforcement Training
Fire Service Training
Leadership Training
Citizenship Development

Professional In-service Programs
Library Administration
Nurse Improvement

Family Life
Knitting
Creative Arts
Sewing
Furniture Refinishing
Personal Care

Cultural Enrichment
Driver Education
Oil Painting
Music Education

Business and Industrial Services
Air Conditioning
Brick Masonry
New Industry Training
Carpentry
Food Service
Small Engine Repair
Custodial Training

Blueprint Reading
Manpower Development Training
Sewing Machine Mechanics
Welding
Supervisory Development Training

Community Service

Seminars
Conferences
Speakers
Musical Programs

Individual instruction and personal achievement are emphasized in each of the instructional areas. Courses are available in each of the areas through programmed instruction. The objective is to help adults progress from their present educational level through a functional level of twelfth grade.

Level One:	Non-readers through grade four; basic reading, writing and arithmetic.
Level Two:	Grade nine through grade twelve; reading improvement, English expression, arithmetic, geography, and social studies.
Level Three:	Grade nine through grade twelve, reading improvement, English expression, mathematics, science, social studies.

PROGRAMMED INSTRUCTION LEARNING LABORATORY

The Programmed Instruction Learning Laboratory provides an opportunity for any interested adult, whether he has completed high school, college, or not, to study any of over two hundred programmed instruction courses ranging in difficulty from the elementary school level to the college level. The total cost of study is about $2.00 per year. Each of these courses is presented in a book, a booklet which reduces the course content into simple, step-by-step units. Individuals studying most of these courses are completely free to set their own study pace. Students who are advised to complete phases of programs leading to a high school diploma, or are required to do remedial study in association with a college course of study, are expected to show steady progress toward a pre-determined objective of learning laboratory study. There are no teacher-administered tests, grade assignments, or set speeds of completion for most programmed instruction courses.

Many courses are included in each of the following areas; Busi-

ness and industry, English, Foreign Languages, Leisure Activities, Health and Safety, Mathematics, Psychology, Reading, Science and Technology, Social Sciences.

Any person interested in the Programmed Instructional Learning Laboratory should contact the Learning Laboratory Coordinator, Surry Community College, Dobson, North Carolina.

GENERAL EDUCATIONAL DEVELOPMENT TEST

Individuals who wish to receive the Certificate of High School Equivalency may apply to take the General Educational Deevlopment Test at the college. A schedule of test dates will be made available to interested persons on request.

A total score of 225 or more with no single test below a standard score of 35 is considered passing and qualifies the applicant to receive the certificate issued by the State Department of Public Instruction.

Any person who is not a high school graduate may apply for the certificate and take the GED test if: (1) he is nineteen (19) years of age or older; (2) he is a resident of the state; and (3) he has a definite vocational or educational purpose.

LAW ENFORCEMENT TRAINING

Law Enforcement Training is provided at the request of law enforcement agencies or individuals. Courses are especially designed as in-service and pre-service education for those engaged in law enforcement activities. Workshops and courses are offered in many areas such as the following: Courts and Laws, Elements of Offenses, Motor Vehicle Law, Criminal Investigation, Report Writing, Juveniles, Applied Psychology, Human Relations, Instructor Training, Firearms, Photography.

FIRE SERVICE TRAINING

Fire Service Training is designed to provide firemen the opportunity to gain technical information and skill in modern fire fighting. The classes are taken directly to the firemen through training sessions held in local departments and training fields in the community. Among the courses offered are the following: Introduction to Fire Fighting, Portable Fire Extinguishers, Fire Fighting Procedures, Arson Detection, Rope, Ladder, Hose, Rescue Practices, Forcible Entry, Protective Breathing Equipment, Ventilation.

LEADERSHIP TRAINING

The increasing complexity of American society demands that greater attention be given to leadership training. Leadership oriented courses are provided for civic, religious, professional, social, and other groups desiring leadership training. Courses provided are: Public Speaking, Parliamentary Procedure, Program Planning, Conferences That Work, Discussion Leadership, Committee Organization.

CITIZENSHIP DEVELOPMENT

The development of creative citizenship responsive to community potential and problems is an imperative of these times. Courses in citizenship education contribute to such development. Courses are

available in these subject areas: American History, World History, International Affairs, North Carolina History, State Government, Social Problems, City and County Government.

SUPERVISORY DEVELOPMENT TRAINING

Supervisory Development Training Courses are designed for potential and active supervisors who want to prepare for more effective leadership and advancement. Only a materials fee of ten cents per student contact hour is charged. Courses are offered at the College campus or in industrial plants. The courses are flexible in terms of content and meeting times. Every effort is made to fit course content to particular industrial or business needs. Emphasis is placed on training individuals in supervisory skills which help reduce worker training time, improve worker safety records, reduce labor turnover, improve product quality, upgrade production records, and improve an industry's image. Courses are available in the following subject areas: Principles of Supervision (Seven Parts), Human Relations I and II, Art of Motivating People, Economics in Business and Industry, Effective Communications, Effective Writing, Effective Speaking, Reading Improvement, Work Measurement, Job Methods, Conference Leadership, Job Instruction Training, Creative Thinking, Industrial Safety and Accident Prevention, Industrial First Aid, The Supervisor in North Carolina, The Supervisor and Employee Benefits, Job Analysis Training, Cost Accounting for Supervisors, Supervision in Hospitals.

BUSINESS MANAGEMENT

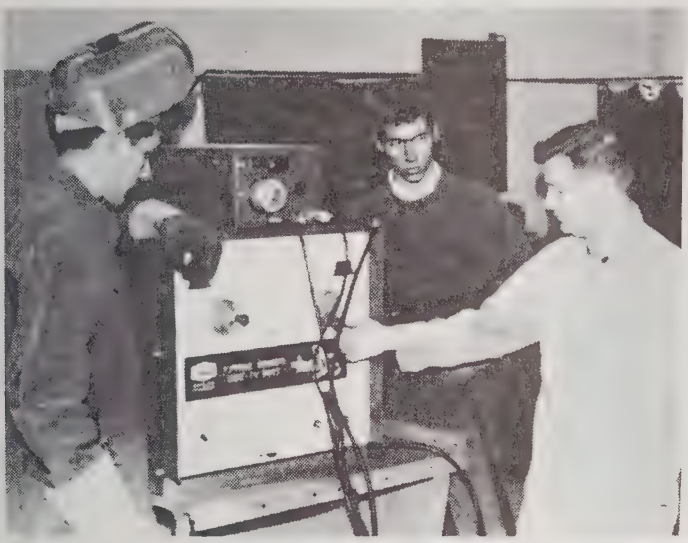
Business Management Courses are planned for individuals employed in wholesale and retail occupations. Emphasis is placed on improving customer and job relations, making the best use of advertising, improving individual personality and salesmanship, developing oral communications, and training individuals to function more effectively in their respective occupations. Courses and workshops are offered in these subject areas: Job Relations in Business, Customer Relations, Personality Development, Creative Salesmanship, Advertising, Marketing Research.

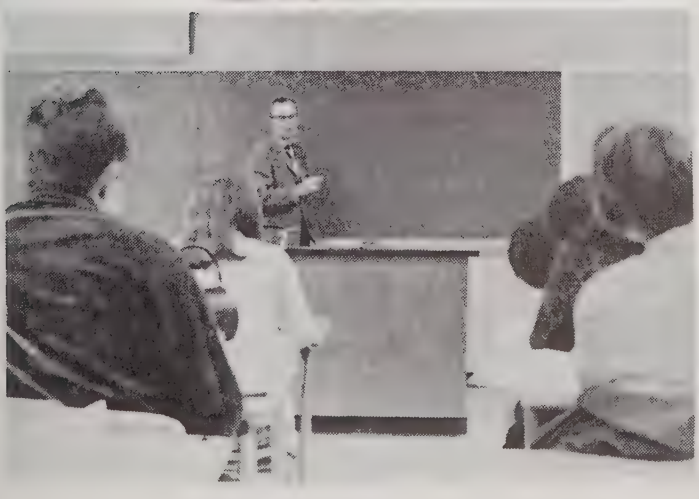
VOCATIONAL IN-SERVICE EDUCATION

Non-curriculum short courses are planned especially for adults who desire to update themselves in skilled and technical areas. Areas in which courses may be planned: Welding, Electricity, Carpentry, Agricultural Technology, Masonry, Automotive Mechanics, Electronics, Surveying.

COMMUNITY SERVICE PROGRAMS

Surry Community College will sponsor and promote a number of Community Services which contribute to the cultural, economic, and civic improvement of the community. Such services may arise from almost every program area. Community Service activities include the following: Seminars, Conferences, Forum Series, Speakers, Discussion Groups, Lecture and Film Series, Fine Arts Exhibits, Musical Programs, Community Studies, Drama Programs.





COURSES OF INSTRUCTION

COURSE NUMBERING SYSTEM

Course designations consist of a three-or four-letter prefix and a number that indicate the curriculum and the level of the course. Freshman level courses are indicated by numbers ranging between 100-200; sophomore level courses 200-300. The 1100 numbering series designates courses in the vocational programs. On the same line, following the number, appear the course title, the number of lecture and laboratory hours per week, and the number of quarter hours earned by successfully completing the course.

AGR 104—Introduction to Agricultural Economics 3 0 3

An introduction to economics, the functions of the economic system and agriculture's role in the economy. A review of the functions of the manager and an introduction to the principles he uses in making decisions to adjust to changing conditions. Analysis of the main sources of change which affect agricultural firms.

AGR 125—Animal Science 3 2 4

An introductory animal science course covering the fundamental principles of livestock production. A study of the animal body and the basic principles of reproduction, genetics, growth, fattening, digestion, along with the selection, feeding, improvement, processing, and marketing of livestock.

AGR 150—General Horticulture 3 2 4

A course dealing with horticulture principles and the application of plant science fundamentals to horticultural practices.
Prerequisite: AGR 170—Plant Science

AGR 170—Plant Science 3 2 4

An introductory general botany and crop science course covering the fundamental principles of the reproduction, growth, functions, and development of seed-bearing plants with application to certain commercially important plants in North Carolina.

AGR 180—General Poultry Science 3 2 4

An introduction to the science of poultry production. The major phases of the study include the history of the poultry industry; the anatomy and physiology of the chicken; the breeds and varieties; the breeding principles, the principles of incubation, brooding, rearing, feeding, housing, and management; marketing poultry products; and the science of disease and parasite prevention and control.

AGR 185—Soil Science and Fertilizers 3 2 4

A course dealing with basic principles of efficient classification, evaluation, and management of soils; care, cultivation, and fertilization of the soil, and conservation of soil fertility.

AGR 201—Agricultural Chemicals 3 2 4

A study of farm chemical pesticides, their ingredients, formulation, and farm application, with emphasis on the effective and safe use of chemicals in agricultural pest control.

AGR 204—Farm Business Management 3 0 3

A review of the functions of the manager of a business firm and

the problems he faces. Development of the concept of planning by both partial and complete budgeting. Review of the concepts of costs and the length of run in production. Practice in preparing enterprise budgets as an aid in choosing what to produce. Use of partial budgeting to find the least cost production procedure. Analysis of production data to select the level of production that yields the most net revenue. Relationship between size, efficiency and income of a farm. Review of procedures for evaluating the efficiency of the manager.

Prerequisite: AGR 104.

AGR 205—Agricultural Marketing 3 0 3

An analysis of the functions of marketing in the economy and a survey of the problems marketing faces. A review of the market foreign markets. Problems in the operations of marketing firms including buying and selling, processing, standardization and grading, risk taking and storage, financing, efficiency, and cooperation. Discussion of procedures of marketing such commodities as grain, cotton, livestock and tobacco.

AGR 218—Agricultural Mechanization 3 0 3

A study of farm machinery management and labor-saving devices. The economics of selection and operation of farm machinery. Study and evaluation of feed grinders and mixers, storage facilities, materials handling systems and other labor-saving devices.

AGR 222—Agricultural Construction 3 2 4

A study of practical planning of housing systems for humans, livestock, farm commodities, and equipment storage. The design will be related specifically to layout procedures, materials of construction, structural features, and cost estimating. There will be practical exercises in preparing sketches, blueprint reading, and job planning.

AGR 228—Livestock Diseases and Parasites 3 2 4

A course dealing with the common diseases and parasites of livestock; sanitation practices and procedures with emphasis on the cause, damage, symptoms, prevention and treatment of parasites and diseases, and management factors relating to disease and parasite prevention and control.

Prerequisite: AGR 125..

AGR 271—Field Crops 3 0 3

A study of crop species grown in southeastern United States and their place in the farm and economics programs. An application of the principles of crop production will be given for the major grain, oil, fiber, and special crops. The study will include the cultural practices, disease, and insect control, fertilization, weed control, grading and marketing of all field crops.

Prerequisite: AGR 170—Plant Science

AGR 272—Tobacco Technology 3 0 3

All phases of tobacco production and marketing will be discussed. The latest research problems and findings dealing with this important cash crop will be discussed in relation to: types of tobacco, the development and selection of varieties, plant production, diseases and insect control, soils, fertilization, cultural practices, harvesting, curing, grading, marketing, and manufacturing as it influences cultural practices.

ART

ART 101—Art History I 3 0 3

A general survey of art history against the background of Western culture. The arts of antiquity through Gothic, the periods are studied in relation to their political, religious, and social setting.

ART 102—Art History II 3 0 3

The art and artists of Europe from the Renaissance to the present time.

ART 130—Introduction to Art 3 0 3

A beginner's course for those interested in learning to look at, appreciate, and enjoy the visual arts. The elements used to create a work of art are studied through discussion, reference to art works of the past and present, and actual experimentation in the various art media.

ART 131—Drawing I 3 0 3

The student is encouraged to discover an individual approach to the problems relating to expression and communication in graphic art. Areas of study include life drawing, stressing line, form and contour; landscape and city scape drawing, stressing the elements of proportion, composition and perspective. The student becomes familiar with several graphic media.

ART 132—Drawing II 3 0 3

A continuation of Art 131 emphasizing training in anatomy and life drawing. The relationship of medium to subject and historic and contemporary idioms will be analyzed.

Prerequisite: Art 131.

ART 133—Arts and Crafts 3 2 4

Provides for the acquisition of skills in the use of varied materials such as art metals, leather, plastics, papier-mache, and linoleum blocks. Designed for teacher education and religious education majors. Also valuable for hobby and leisure time activities. Laboratory periods.

ART 201—Painting I 3 0 3

A beginner's course in oil painting. Composition and color values are stressed. Subject matter: still-life and figure. The student is introduced to technical problems such as color mixing, use of palette, use of color wheel, and brush techniques. Composition and color theory are an integral part of this course.

ART 202—Painting II 3 0 3

A continuation of ART 201—Painting I. Use of full color palette, nonobjective composition, stiff life, flower painting, and figure painting. Continuing emphasis upon composition and color theory.

ART 203—Painting III 3 0 0

A continuation of ART 202—Painting II. Landscape painting, figure painting, still life, color, values, and composition are stressed.

ART 204—Painting: Water Color 3 0 3

Water color: transparent water color used for still life, flowers, and landscape compositions. Field trips offer opportunity to paint local mountain scenery.

AUTOMOTIVE

AUT 1101—Automotive Air Conditioning 2 3 3

General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of operation, and control; proper handling of refrigerants in charging the system.

AUT 1111—Internal Combustion Engine 3 12 7

Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cam and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing.

AUT 1112—Engine Electrical and Fuel Systems 5 12 9

A thorough study of the electrical and fuel systems of the automobile. Battery cranking mechanism, generator, ignition, accessories and wiring; fuel pumps, carburetors, and fuel injectors. Characteristics of fuels, types of fuel systems, special tools, and testing equipment for the fuel and electrical system.

Prerequisite: AUT 1101.

AUT 1121—Braking Systems 3 3 4

A complete study of various braking systems employed on automobiles and lightweight trucks. Emphasis is placed on how they operate, proper adjustment, and repair.

Prerequisite: PHY 1102.

AUT 1123—Automotive Chassis and Suspension Systems 3 9 6

Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of suspension and steering systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, and front end, and alignment.

Prerequisite: PME 1102.

AUT—1124—Automotive Power Train Systems 3 9 6

Principles and functions of automotive power train systems; clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing and repair.

Prerequisites: PHY 1102, AUT 1123.

AUT 1125—Automotive Servicing 3 9 6

Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Troubleshooting of automotive systems, providing a full range of experiences in testing, adjusting, repairing and replacing.

Prerequisites: AUT 1123, AUT 1121, AUT 1101.

BIOLOGY

BIOL 101—General Biology I 3 3 4

This course is designed to familiarize the student with the basic principles, problems, and similarities of living organisms. Emphasis is placed upon the chemical and morphological basis of life.

BIOL 102—General Biology II 3 3 4

This course will acquaint the student with the perpetuation of life, development of the organism, and the formation of organism populations and communities.

Prerequisite: BIOL 101.

BIOL 103—General Biology III 3 3 4

An application of the principles acquired in Biology 101 and 102 will be utilized to give the student an appreciation of the origin and diversity of life in the plant and animal kingdoms.

Prerequisites: BIOL 101, 102.

BIOL 104, 105—Anatomy and Physiology 3 3 4

This is a basic course of the structure and function of the human body as related to nursing training. The body as an integrated whole, the moving body, body control, maintaining the metabolism of the body, reproduction, and control of body functions are the major topics of instruction. The laboratory sessions are correlated with the material in the lecture sessions to give the student practical experience in the basic phases of the course.

BIOL 111—Nutrition I 3 0 3

A study of the essentials of an adequate diet. Topics considered are energy, protein, mineral and vitamin requirements, metabolism, deficiencies in the diet and their effects, and diet in relation to age and physical condition.

BIOL 201—Local Flora 3 4 5

A field and laboratory study of local flora concerned with their classification, identification, and ecology by the use of keys and field studies.

Prerequisites: BIOL 101, 102, 103.

BIOL 202—Invertebrate Zoology 3 3 4

An advanced study of taxonomy, morphology, physiology, and the development of invertebrates stressing the major phyla.

Prerequisites: BIOL 101, 102, 103.

BIOL 203—Comparative Vertebrate Anatomy 3 4 5

An anatomical study of representative vertebrates including considerations of their morphology, physiology, ecology, and evolution.

Prerequisites: BIOL 101, 102, 103.

BUSINESS

BUS 101—Introduction to Business 3 0 3

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management.

BUS 102—Typewriting I 3 2 3

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

BUS 103—Typewriting II 3 2 3

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript correspondence, and business forms.

Prerequisite: BUS 102 or the equivalent. Speed requirement, 30 words per minute for five minutes.

BUS 104—Typewriting III 3 2 3

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms.

Prerequisite: BUS 103 or the equivalent. Speed requirement, 40 words per minute for 5 minutes.

BUS 105—Business Mathematics 3 0 3

This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business.

BUS 106—Shorthand I 3 2 4

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.

BUS 107—Shorthand II 3 2 4

Continued study of theory with greater emphasis on dictation and elementary transcription.

Prerequisite: BUS 106 or the equivalent.

BUS 108—Shorthand III 3 2 4

Theory and speed building. Introduction to office style dictation.

Emphasis on development of speed in dictation and accuracy in transcription.

Prerequisite: BUS 107.

BUS 110—Office Machines I 2 2 3

A general survey of business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard machines, and calculators.

tion of the ten-key adding machines, full keyboard machines, and calculator.

BUS-111—Office Machines II 2 2 3

Instruction in the operation of the bookkeeping-accounting machines, duplicating equipment, and the dictating and transcribing machines.

Prerequisite: BUS 110.

BUS 115—Business Law I 3 0 3

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.

BUS 116—Business Law II 3 0 3

Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership - corporation, mortgages, and property rights.

Prerequisite: BUS 115.

BUS-117—Business Law III 3 0 3

Continuation of business law stressing guaranty and suretyship, insurance, landlord and tenant liens, wills, trust and bankruptcy, and transportation.

Prerequisite: BUS 116.

BUS 123—Business Finance I 3 0 3

Financing of business units, as individuals, partnerships, corporations and trusts. A detaailed study is made of short-term, long-term, and consumer financing.

BUS 124—Business Finance II 3 0 3

Financing, federal, state, and local government and the ensuing effects upon the economy. Factors affecting supply of funds, monetary and credit policies.

Prerequisite: BUS 123.

BUS 131—Principles of Accounting I 2 3 3

A study of the procedures of accounting and theory underlying those procedures. Introduction to double entry accounting.

Prerequisite: BUS 105.

BUS 132—Principles of Accounting II 2 3 3

A continuation of accounting theory developed in BUS 131 with concentration on single proprietorship and partnerships through the use of balance sheets, income statements and other accounting forms.

Prerequisite: BUS 131.

BUS 133—Principles of Accounting III 2 3 3

A study of accounting as applicable to corporations with a comparison between accounting records as they differ between privately owned and corporately owned enterprises.

Prerequisite: BUS 132.

BUS 131S—Accounting-Secretarial 2 3 3

Principles, techniques and tools of accounting, for understanding, the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service mercantile enterprises, to include practical application of the principles learned.

Prerequisite: BUS 105.

BUS 132S—Accounting-Secretarial 2 3 3

Partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting data for management control as well as on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.

BUS 180-M—Medical Terminology and Vocabulary 3 0 3

To develop an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business, technical, and professional offices.

BUS 205—Advanced Typewriting 2 3 3

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation, and the typing of reports, manuscripts and legal documents.

Prerequisite: BUS 104. Speed requirement, 40 words per minute for 5 minutes.

BUS 206-E, 206-M or 206-L—Dictation and Transcription 3 2 4

Develops the skill of taking dictation and of transcribing at the typewriter materials appropriate to the course of study, which includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 100 words per minute required for 5 minutes on new material.

BUS 207-E, 207-M or 207-L—Dictation and Transcription 3 2 4

Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 110 words per minute required for 5 minutes on new material.

BUS 208-E, 208-M or 208-L—Dictation and Transcription 3 2 4

Principally a speed building course, covering materials appropriate to the course of study, with emphasis as well as accuracy. Minimum dictation rate of 10 words per minute required for 5 minutes on new material.

Prerequisites: BUS 207.

BUS 209—Production Typing 2 3 3

Printed business forms are used to develop accuracy and speed. Designed as a pre-employment review of typing techniques.

BUS 211-L—Office Machines — Stenoprint 2 2 4

Students receive training in the techniques, operation, and application of a Stenoprint machine.

BUS 214-E, 214-M or 214-L—Secretarial Procedures 3 2 4

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims.

BUS 215-M, 215-E or 215-L—Office Application 3 12 6

During the sixth quarter only, students are assigned to work in a business, technical, or professional office for 12 hours a week. The objective is to provide actual work experience for secretarial students and an opportunity for the practical application of the skills and knowledge previously learned according to the course of study.

Prerequisites: BUS 214, BUS 205, BUS 207.

BUS 229—Taxes 3 2 4

Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise, and inheritance.

Prerequisite: BUS 131.

BUS 232—Sales Development 3 0 3

A study of retail, wholesale and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for an execution of sales demonstrations required.

BUS 235—Business Management 3 0 3

Principles of business management including overview of major functions of management, such as planning, staffing, controlling, directing and financing. Clarification of the decision-making function. Role of management in business-qualifications and requirements.

BUS 239—Marketing 3 0 3

A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing processes.

BUS 243—Advertising 3 2 4

The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals; product and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media.

BUS 251, 252, 253—Cost Accounting I, II, III 2 3 3

This course is designed to develop the principles used in accounting to aid management in their planning, controlling, and analyzing of effectiveness of advertising. Theory and practice of writing advertising copy for various media.

cost data. The areas studied include budgets, job and process costing, estimates and standard costing, direct costing, and break-even analysis.

Prerequisite: BUS 133.

BUS 271—Office Management 3 0 3

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems.

BUS 272—Principles of Supervision 3 0 3

Introduces the basic responsibilities and duties of the supervisor and his relationship to supervisors, subordinates, and associates. Emphasis on securing an effective work force and the role of the supervisor. Methods of supervision are stressed.

BUS 273—Elements of Retailing 3 0 3

This course is designed to help students understand retailing from the viewpoint of the owner or manager. Topics studied; organization of the retail firm; establishment of stores; customer needs; purchasing and financing; advertising and selling; planning and control.

BUS 274—Personnel Management 3 0 3

The techniques of supervising and coordinating the work of others. Among the items covered are employment interview techniques, training procedures, supervision of employees, delegating authority and responsibility, factors influencing employees' morale, job studies and descriptions, current policies on labor-management relations and labor legislation affecting business workers.

BUS 275—Principles of Insurance 3 0 3

Types and provisions of life, property and casualty insurance from the point of view of an individual and business enterprise.

BUS 280-M—Medical Terminology and Vocabulary 3 0 3

Greater emphasis on an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business.

Prerequisite: BUS 180-M.

BUS 1103—Small Business Operations 3 0 3

An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations.

BUS 1105—Industrial Organizations 3 0 3

Methods, techniques, and practices of modern management in planning, organizing and controlling operations of a manufacturing concern. Introduction to the competitive system and the factors constituting product cost.

CARPENTRY

CARP 1101—Carpentry I 4 16 6

An introduction to carpentry as a vocation: Basic knowledge and skills in hand and power tools, laboratory experience in layout for excavation and footings, introduction to wall, ceiling, and roof structures.

CARP 1102—Carpentry II 4 16 6

Continuation of Carpentry I including laboratory experience in form construction, floor sills, girders, posts, and joists; wall framing for doors and windows; roof rafters, dormers and porches. Principal woods and their uses, grades, and classification.

CARP 1103—Carpentry III 4 16 6

Continuation of Carpentry II including layout and construction of house section, scaffolding, sheathing, and roofing; insulation, trim and finishing of inside and outside sections. A study of using a variety of woods and materials is also included in this course.

CARP 1104—Carpentry IV 4 16 6

A continuation of Carpentry III. This course includes cabinet construction; stairway layout, construction, and finishing; building codes, permits, contracts, and essentials preparatory to building; architectural styles and specifications.

CARP 1110—Building Trades Survey 4 0 2

Course includes a general survey of other trades related to carpentry. Students will be introduced to bricklaying, building material, plumbing fundamentals, house wiring, and heating, refrigeration and air conditioning through field trips, audio visual aids, and general lectures.

CARP 1114—Building Codes 3 0 3

A study is made of building codes and the minimum requirements for local, county and state construction regulations. This involves safety, sanitation, mechanical equipment and materials. Also, a review will be made of the minimum property requirements of the Federal Housing Administration and the North Carolina Code.

CHEMISTRY

CHEM 101—General Chemistry I 3 3 4

A course providing instruction in language of chemistry; fundamental chemistry laws and theories, preparation and properties of elements and their compounds.

CHEM 102—General Chemistry II 3 3 4

A continuation of 101 to include the following concepts: chemical change, kinetic-molecular theory and atomic structure compound formation. Emphasis is placed on the mastery of formula and equation writing and of chemical calculations.

CHEM 103—General Chemistry III 3 3 4

A continuation of 102 with emphasis placed on gas laws, calculation of formulas, weight and volume relationships, equivalent weight, standard solutions, chemical equilibrium, redox and electro chemistry, Introduction to organic and nuclear chemistry.

CHEM 111—Chemistry for Nurses 3 3 4

Emphasis is placed on the principles of chemistry most applicable to nursing. Lecture and lab work deals with the study of general chemistry, chemical equations, organic chemistry, physiological and pathological chemistry, mechanics energy, and biochemistry.

CHEM 201—Qualitative Analysis 3 3 4

A course which extends the study of chemical principles to include equilibria of slightly soluble salts and of complex ions and systematic analysis. Laboratory consists of the qualitative analysis of both principles and techniques of separation and identification of inorganic cations and anions.

Prerequisite: CHEM 103 of permission of instructor.

CHEM 204, 205, 206—Organic Chemistry I, II, III 3 3 4

A year's course in the fundamentals of organic chemistry. The structure, physical properties, synthesis and typical reactions of the various series of aliphatic, alicylclic and aromatic compounds are studied with attention to reaction mechanisms. In the laboratory representative carbon compounds are synthesized with emphasis on basic laboratory techniques. Lecture 3 hours, Laboratory 3 hours; Total 6 hours per week. Four hours credit per quarter.

Prerequisites: CHEM 101-102-103.

DATA PROCESSING

EDP—104—Introduction to Data Processing Systems 3 2 4

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detail study of particular computer problems. This course is a prerequisite for all programming courses.

Prerequisite: BUS 131.

EDP 105—Survey of Data Processing 3 0 3

A survey of concepts and principles of data processing systems. Basically, this course is the same as EDP 104 with laboratory omitted and credit reduced. This course does not replace EDP 104 in a program where EDP 104 is a required 4-credit hour course.

DRAFTING

DFT 101—Technical Drafting I 0 6 2

The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced.

DFT 102—Technical Drafting II 0 6 2

Application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions will be studied. Most important is the introduction of the graphical analysis of space problems. Problems of practical design elements shall be studied. Dimensioning practices for "details" and "working drawing," approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects.

Prerequisite: DFT 101.

DFT 103—Technical Drafting III 0 6 2

Intersection and developments and their practical solutions. Where applicable, model solutions accompany the problems. The various techniques employed to produce and render isometric and oblique drawings, dimetric and trimetric projections, will be included oblique drawings, isometric, dimetric and trimetric projections will be included.

Prerequisite: DFT 102.

DFT 104—Electronics Drafting 2 3 3

A continuation of skills and techniques in DFT 101 with special emphasis on electronic schematic diagrams and electronic circuit design.

DFT 201—Technical Drafting IV 2 6 4

Applications and constructions of charts, graphs, and nomographs in engineering and technical data. Screw threads, springs, keys, rivets, piping, and welding symbols, methods of representing and specifying will be covered. Basic mechanisms of motion transfer, gears and cams, will be studied and drawn with emphasis on methods of specifying, calculating, dimensions, and dilineating.

Prerequisite: DFT 103.

DFT 204—Descriptive Geometry 2 4 4

Graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems will be stressed with analytical verification where applicable. Visualization shall be stressed on every problem.

Prerequisites: DFT 102, MAT 102.

DFT 205—Design Drafting I 2 6 4

Basic design is introduced in the study of motion transfer mechanisms as they relate to power trains. Principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings and simplified drafting practices constitute areas of study. Types and methods of specifying materials and workmanship are an integral part of the course.

Prerequisites: DFT 204, MAT 102, PHY 102.

DFT 206—Design Drafting II 2 6 4

Research to solve a problem in design by consulting various manuals, periodicals, and through laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly and sub-assembly drawings, pictorial drawings, exploded pictorial assembly, patent drawings and specifications are required as a part of the problem.

Prerequisite: DFT 205.

DFT 211—Mechanisms 3 2 4

Mathematics and drafting room solutions of problems involving the principles of machine elements. Study of motion linkages, velocities and acceleration of points within a link mechanism; layout methods for designing cams, belts, pulleys, gears and gear trains.

Prerequisites: DFT 201 and 204, MAT 103, PHY 106.

DFT 212—Jig and Fixture Design 2 4 4

Commercial standards, principles, practices and tools of jig and fixture design. Individual project and design work to acquaint students with the types of jigs and fixtures and their design.

Prerequisites: DFT 205, DFT 211.

DFT 1101—Schematics and Diagrams: Power Mechanics 0 3 1

Interpretation and reading of blueprints. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.

DFT 1104—Blueprint Reading: Mechanical 0 3 1

Interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.

DFT 1110—Blueprint Reading: Building Trades 0 3 1

Principles of interpreting blueprints and trade specifications common to the building trades. Development of proficiency in making three view and pictorial sketches.

DFT 1112—Blueprint Reading and Sketching 0 3 1

Designed to develop abilities in reading complex drawings in the masonry field. Blueprints of residential and commercial buildings will be studied with emphasis on the plot plan, floor plan, basement and/or foundation plan, walls and various detailed drawings of masonry work.

Prerequisite: DFT 1111.

DFT 1113—Blueprint Reading: Electrical 0 3 1

Interpretation of schematics, diagrams and blueprints applicable to electrical installations with emphasis on electrical plans for domestic and commercial buildings. Sketching schematics, diagrams, and electrical plans for electrical installations using appropriate symbols and notes according to the applicable codes will be a part of this course.

Prerequisite: DFT 1110.

DFT 1115—Blueprint Reading: Plumbing Trades 0 3 1

Sketching diagrams and schematics, and interpretation of blueprints applicable to the plumbing trades. Emphasis will be on plumbing plans for domestic and commercial buildings. Piping symbols, schematics, diagrams and notes will be studied in detail. Applicable building and plumbing codes will be used for reference.

Prerequisite: DFT 1110.

DFT 1116—Blueprint Reading: Air Conditioning 1 3 2

A specialized course in drafting for the heating, air conditioning and refrigeration student. Emphasis will be placed on reading of blueprints that are common to the trade; blueprints of mechanical components, assembly drawings, wiring diagrams and schematics, floor plans, heating system plans including duct and equipment layout plans, and shop sketches. The student will make tracings of floor plans and layout air conditioning systems.

Prerequisite: DFT 1122.

DFT 1117—Blueprint Reading: Welding 0 3 1

A thorough study of trade drawing in which welding procedures are indicated. Interpretation, use and application of welding symbols, abbreviations, and specifications.

Prerequisite: DFT 1104.

EDUCATION

EDU 201, 202—Introduction to Education 3 0 3

A course designed to acquaint the prospective teacher with four major aspects of education: the teaching profession, the school system, the teacher, and the pupil. Two quarters.

EDU 203—Teacher's Aide Seminar 3 0 3

This course is a seminar for Teacher Aides. The course will include audiovisuals, bulletin board preparation, professional attitudes, and general school procedures. Resource personnel from the local school system will assist.

EDU 204—Teacher's Aide Internship 0 18 6

This course includes practical experiences in school work. The student will be placed on the job during the sixth quarter for a minimum of 18 hours per week. The course may be waived by a statement from a school official that the student has been successfully employed in a teacher's aide capacity for the required hours (approximately 200 hours.) **Teacher Aide program only.**

ECONOMICS

ECO 201-202-203—Principles of Economics 3 0 3

A study of the present-day economic system; demand, supply, prices, and cost; wages, rent, interest, and profit; business cycles, money, banking, and the Federal Reserve System; international trade; and a comparison of Capitalism, Socialism, Communism, and Fascism. (3 credits each quarter.)

ELECTRICITY

ELC 101—Fundamentals of Electricity I 4 4-6 6

Elementary principals of electricity including: basic electric units, Ohms law, Kirchoffs laws, network theorems, magnetics, basic electrical measuring instruments, inductance, capacitance, sine wave analysis, and non-resonant resistive, inductive and capacitive networks.

ELC 102—Fundamentals of Electricity II 4 4-6 6

Series and parallel resonant-circuit analysis, resonant, and non-resonant transformer analysis, basic diode power supply analysis, introduction to non-linear resistive control devices, and introduction to electro-mechanical devices.

Prerequisite: ELC 101.

ELC 1102—Applied Electricity 2 3 3

The use and care of test instruments and equipment used in servicing electrical apparatus for air conditioning and refrigeration installation. Electrical principles and procedures for trouble-shooting of the various electrical devices used in air conditioning, heating, and refrigeration equipment. Included will be transformers, various types of motors and starting devices, switches, electrical heating devices and wiring.

Prerequisite: PHY 1101.

ELC 1112—Direct and Alternating Current 5 12 9

A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. An analysis of direct current circuits by Ohm's Law and Kichhoff's Law. A study of the sources of direct current voltage potentials. Fundamental concepts of alternating current flow, reactance, impedance, phase angle, power, and resonance. Analysis of alternating current circuits.

ELC 1113—Alternating Current and Direct Current Machines and Controls 5 12 9

Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis. The basic concepts of AC and DC machines and simple system controls. An introduction to the type control used in small appliances such as: thermostats, timers, or sequencing switches.

Prerequisites: ELC 1112, MAT 1115.

ELC 1124—Residential Wiring 5 9 8

Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications such as: services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, National Electrical Code regulations in actual building mockups.

Prerequisites: ELC 1113, DFT 1110.

ELC 1125—Commercial and Industrial Wiring 5 12 9

Layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation, and installation of simple systems.

Prerequisites: ELN 1118, ELC 1124.

ELECTRONICS

ELN 101—Electronic Instruments & Measurements 1 4-6 3

A study of basic electronic instruments, their theory of operation, function, tolerances, and calibration. Both service and laboratory instruments will be seudied. Laboratory experience will provide application of each type instrument studied.

Prerequisite: ELC 102. Corequisite ELN 105.

ELN 105—Control Devices 5 4-6 7

A study in depth of the electrical characteristics of vacuum tubes and transistors. Basic parameters and applications of each type device to the three configurations of a three terminal two port system will be included.

Prerequisite: ELC 102. Corequisite ELN 101.

ELN 205—Applications of Vacuum Tubes and Transistors 5 4-6 7

Practical applications of vacuum tubes and transistors to basic audio amplifiers, radio frequency amplifiers, detectors, modulators and oscillators.

Prerequisite: ELN 105.

ELN 210—Semiconductor Circuit Analysis 5 2-3 6

A study in some depth of the analysis and design of transistor circuits. Network theorems and equivalent circuits are used extensively in evaluating total circuit performance. Device peculiarities and limitations pertinent to reliable operations are considered. H. Y. Z. and T. parameters are employed as well as single-flow graphs.

Prerequisite: ELN 105.

ELN 214—Wave Shaping and Pulse Circuits 2 2-3 3

Broadband amplifiers, magnetic amplifiers, multivibrators, wave shaping techniques, chopper amplifiers, clipper and clamper circuits.

Prerequisites: ELN 105, MAT 103.

ELN 215—Wave Shaping and Pulse Circuits 2 2-3 3

Pulse techniques, diode switches, gates, step-counter, restorers and other specific circuits with function as switches.

Prerequisite: ELN 214.

ELN 220—Electronic Systems 5 4-6 7

A block diagram course investigating numerous electronic systems. Modules or blocks of various circuit already studied are arranged in various manners to produce complex electronic systems. Systems will be explained and reduced to functions and then to block diagrams. AM, FM, and Single Sideband transmitters and receivers, multiplexing, TV transmitters and receivers, pulse-modulated systems, computers, telemetry, navigational systems, sonar and radar will be considered.

Corequisite: ELN 215.

ELN 1118—Industrial Electronics 3 6 5

Basic theory, operating characteristics, and application of vacuum tubes such as: diodes, triodes, tetrodes, pentodes, and gaseous control tubes. An introduction to amplifiers using triodes, power supplies using diodes, and other basic applications.

Prerequisite: ELC 1113.

ELN 1119—Industrial Electronics 3 6 5

Basic industrial electronic systems such as: motor controls, alarm systems, heating systems and controls, magnetic amplifier controls, welding control systems using thyratron tubes, and other basic types of systems commonly found in most industries.

Prerequisite: ELN 1118.

ENGINEERING

ENGR 105—Graphics for Engineers I 2 4 3

Instruction in the use of drafting instruments, freehand drawing, and lettering. Theory of projection, including orthographic multiviews, auxiliary views, and the various kinds of pictorial projections. Sectional views and conventional practices, dimensioning and notations. Representation and specification of threads and fasteners, gears and cams. Working drawings, including limits and tolerances. Concurrent enrollment in College Algebra or higher.

ENGR 106—Graphics for Engineers II 2 4 3

Basic descriptive geometry; systematic solutions and analysis of the relationships of points, lines, and planes in space; developments and intersections. Applications of graphics to various fields of engineering. Vector geometry, graphic mathematics, and nomography. Concurrent enrollment in College Trigonometry or higher.

ENGLISH

ENGL 090—Remedial English 3 0 0

A course for the improvement and development of writing techniques including emphasis on meaningful and logical sentence construction, paragraph building, outline preparation and themes.

ENGL 100—Developmental Reading I 1 2 1

A course to aid students in improving vocabulary and comprehension skills. Phonics, structural analysis, dictionary usage, critical reading, literal comprehension, and fluency and speed are considered.

ENGL 110—Developmental Reading II 1 2 2

Designed to help the student improve his vocabulary, comprehension, speed, and study skills. Emphasis is placed upon word parts, sentence and paragraph meaning, paragraph patterns, outlining for comprehension and critical reading. Diagnostic testing, reading films, and tachistoscope are incorporated.

ENGL 101—Freshman English I 3 0 3

This course is designed to help the student enrich his knowledge of English grammar, punctuation, sentence and paragraph building, and the use of the dictionary. These mechanics of English will be applied to short themes as required.

ENGL 102—Freshman English II 3 0 3

This course is a continuation of College English I, with frequent themes required. Conferences with individual students are recommended. There will be an introduction to principal literary forms by means of selections from modern authors and periodicals.

Prerequisite: English 101.

ENGL 103—Freshman English III 3 0 3

This course emphasizes the development of good prose style and gives practice in the use of source materials. Longer themes and research papers will be required.

ENGL 201, 202, 203—Survey of English Literature I, II, III 3 0 3

A survey of English Literature from Beowulf to the Twentieth Century. Emphasis will be placed upon the most outstanding and influential writers of the period, including Shakespeare, Chaucer, and Milton.

Prerequisite: English 101, 102, 103.

I Beowulf Trio Shakespeare
II Milton Trio Keats
III Tennyson Trio Yeats

ENGL 205—Report Writing 3 0 3

The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum.

Prerequisite: English 102.

ENGL 206—Business Communications 3 0 3

Develops skills in techniques in writing business communications. Emphasis is placed on writing action-getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgements, remittances, and inquiry.

Prerequisite: English 102.

ENGL 210, 211—Survey of American Literature I, II 3 0 3

A survey of American Literature from 1900 to the present. Emphasis will be on reading rather than literary history. Two quarters.

Prerequisite: English 101, 102, 103.

ENG 1101—Reading Improvement 2 0 2

Designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and work group recognition and train for comprehension in larger units.

ENG 1102—Communication Skills 3 0 3

Designed to promote effective communication through correct language usage in speaking and writing.

Prerequisite: ENG 1101.

FRENCH

FRE 101, 102, 103—Elementary French I, II, III 2 3 3

An introduction to French, with a modern audio-lingual approach. Up-to-date materials and methods. Emphasis first on hearing and speaking, then on reading and writing. Lab work is required as part of the course for those with no previous French or those who do not make a satisfactory score on the French placement test.

Prerequisite: Satisfactory score on college placement test.

FRE 151, 152, 153—Intermediate French I, II, III 2 3 3

A review of the skills of hearing, speaking, reading, and writing. Audio-lingual work in class and in lab. Selected supplementary readings.

Prerequisites: Two units of high school French and a satisfoctory placement test score or FRE 101 and FRE 102.

FRE 201, 202, 203—Survey of French Civilization I, II, II 2 3 3

The first of a two-course sequence. A study of French culture and civilization. Selected readings in French literature from the Middle Ages to the present. Parallel reading and reports.

Prerequisite: FRE 152.

GEOGRAPHY

GEO 201—Physical Geography 3 0 3

The earth's astronomical relations, factors of weather and climate, and physical features.

GEO 202—Economic Geography 3 0 3

Geographic factors involved in production, distribution, consumption, and conservation of the major crops, minerals, and industries of the world.

GUIDANCE 100—Orientation to College 1 0 1

HISTORY

HIST 101, 102, 103—History of Western Civilization 3 0 3

The institution and culture of Western Society from 5,000 B.C. to the present. Topics include the pre-classical Greek and Roman worlds, the growth of Christianity, Medieval Europe, the Renaissance, the Reformation, the emergence of the modern national state, the rist of commercial Capitalism, the Industrial Revolution, the French Revolution, liberalism, nationalism, the alliance system, imperialism, World War II and its aftermath, and the ideologies of the twentieth centry. Three quarters.

HIST 104—Modern History 3 0 3

A foundation for the study of current international problems styled primarily for technical and vocational students. Emphasis is on Europe and America in the nineteenth and twentieth centuries but in a world context and against a general background of ancient, medieval, and early modern history.

HIST 201, 202, 203—American History 3 0 3

A survey of American History from the period of discovery and colonization to the present. The course is conducted through lectures, text books, collateral reading, and map studies.

HIST 204—Current World Problems 3 0 3

A detailed examination of current international problems, including nationalism in underdeveloped countries, racial minorities, water and air pollution, the population explosion and famine, the armaments race, and international organizations—but with emphasis on a particularly urgent problem of present world concern. In addition to text and periodical assignments and daily newspaper readings, each student will be expected to present a comprehensive oral or written report.

MATHEMATICS

MAT 80, 81, 82—Remedial Mathematics 3 0 0

A three-quarter, three-hour per week course consisting of an intensive study of pre-college algebra and geometry and of the arithmetical skills necessary in a study of college-level mathematics.

MAT 101, 102—College Mathematics I, II 3 0 3

A two-quarter course which, along with 103, will comprise the minimum college requirements for all AA degree candidates. These two quarters will consist of a study of sets, logic and axiomatic development of number systems (excluding complex numbers). Ideas of mathematical language and proof applied to elementary algebra. Some number theory including different bases, congruences, and modular systems. Brief treatment of probability and statistical methods. Math 101 is a prerequisite for Math 102. Three quarter hours each quarter.

MAT 103—College Mathematics III 3 0 3

A continuation in the spirit of 101-102 but including algebraic and graphical solutions of systems, linear equasions and inequalities followed by elementary linear programming. Some finite and modern geometries and a non-analytical study of trigonometry. Attempts will be made to introduce the rudiments of plane analytic geometry at least through consideration of standard positions of the conic sections.

Prerequisite: Math 101-102. Three quarter hours.

MAT 105, 106—College Algebra and Trigonometry 5 0 5

Designed to promote understanding of the logic structure of algebra and the development of algebraic techniques, along with a study of analytic trigonometry. Topics include: the theory of sets for integers, rational numbers, real numbers, complex fields, equations, inequalities, functions and relations, expoential and logarithmic functions, trigonometric functions, identities, equations, circular functions, inverse functions, triangle solution including sine and cosine laws. (5 hours credit each quarter.)

MAT 107—Analytic Geometry and Calculus I 5 0 5

A unified sequence in analytic geometry and differential and integral calculus. (This sequence is recommended for students in the sciences and engineering programs.) Prerequisite: Math 106 or the equivalent and consent.

MAT 110—Technical Mathematics I 5 0 5

The real number system is developed as an entension of natural numbers. Number systems of various bases are introduced. Fundamental algebraic operations, the rectangular coordinate system, as well as the fundamental trigonometric concepts and operations are introduced. The application of these principals to practical problems is stressed.

Prerequisite: Satisfactory evidence that admission requirements have been met.

MAT 111—Technical Mathematics II 5 0 5

The objective of this course is to develop an understanding of simultaneous equations, trigonometric functions, with applications and analysis, and the algebra of complex numbers. In addition, students continue to be given instruction in slide-rule operation with work in the accompanying handbook.

Prerequisite: MATH 110.

MAT 112—Technical Mathematics III 5 0 5

The objective of this course is to develop an understanding of analytic geometry and the calculus. Instruction in slide-rule operation continues.

Prerequisite: MATH III.

MAT 205—Analytic Geometry and Calculus II 5 0 5

A continuation of Math 107. Topics include definite integrals; application to areas, volumes, arc lengths and work; exponential and trigonometric functions; integration methods.

Prerequisite: MATH 107 or consent.

MAT 206—Analytic Geometry and Calculus III 5 0 5

A continuation of Math 205. Included will be conics, moments, centers of gravity, indeterminate forms, improper integrals, series, two-dimensional vector algebra, and polar coordinates.

Prerequisite: MATH 205 or consent.

MAT 207—Analytic Geometry and Calculus IV 5 0 5

A continuation of Math 206. Included are three-dimensional vector algebra, multiple integrals, line integrals, surface integrals, and change of variables.

Prerequisite: MATH 206 or consent.

MAT 208—Differential Equations 5 0 5

Special non-linear equations, linear equations, transformations, symbolic method; solutions in series; Gauss, Bessel and Legendre equations; simultaneous differential equations.

Prerequisite: MATH 205, 206, 207

MAT 210—Introduction to Linear Algebra 5 0 5

A study of vectors, matrices, and determinants leading a a wide variety of problems in linear algebra that arise in mathematics and the natural sciences, engineering, business, and the social sciences.

MAT 1101—Fundamentals of Mathematics 5 0 5

Practical number theory. Analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.

MAT 1102—Algebra 5 0 5

Basic concepts and operations of algebra: historical background of our base-10 number system; algebraic operations: addition, subtraction, multiplication and division; fraction, letter representation, grouping, factoring, ratio and proportions, variation; graphical and algebraic solution of first degree equations; solution of simultaneous equations by: addition and subtraction, substitution, graphing, exponents, logarithms, tables and interpolation.

MAT 1103—Geometry 3 0 3

Fundamental properties and definitions; plane and solid geometric figures, selected general theorems, geometric construction of lines, angles and plane figures. Dihedral angles, areas of plane figures, volumes of solids. Geometric principals are applied to shop operations.

MAT 1112—Building Trades Mathematics 3 0 3

Practical problems dealing with volumes, weights, ratios, mensuration, and basic estimating practices for building materials.

MAT 1115—Electrical Mathematics 5 0 5

A study of fundamental concepts of algebra; basic operations of addition, subtraction, multiplication, and division; solution of first order equations, use of letters and signs, grouping, factoring, exponents, ratios, and proportions; solution of equations, algebraically and graphically; a study of logarithms and use of tables; an introduction to trigonometric functions and their application to right angles; and a study of vectors for use in alternating current.

MECHANICS

MEC 101—Machine Processes I 0 6* 2

An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of measuring instruments, characteristics of metals and cutting tools. The student will become famliiar with the lathe family of machine tools by performing selected operations such as turning, facing, threading, drilling, boring and reaming.

MEC 102—Machine Processes II 0 6* 2

Advanced operations on lathe, drilling, boring and reaming machines. Milling machine theory and practice. Thorough study of the types of milling machines, cutters, jig and fixture devices, and the accessories used in a modern industrial plant. Safety in the operational shop is stressed.

Prerequisite: MEC 101.

MEC 205—Strength of Materials 3 2 4

Study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying and dynamic. Analyses of these stresses are made as applied to thin-walled cylinders and sphere, riveted and welded joints, beams, columns and machine components.

Prerequisites: PHY 106, MAT 103.

MEC 210—Physical Metallurgy 3 3* 4

Introductory course in metallurgy, a basic study of the properties of metals and alloys. Analysis of the structure of metals and alloys, atomic structure, nuclear structure, and nuclear reactions. Solid (crystalline) structures, methods of designating crystal planes; liquid and vapor phases; phase diagrams; and alloy systems.

Prerequisite: PHY 101.

MEC 211—Physical Metallurgy 3 3* 4

Properties of metals and alloys, the reactions of metals, diffusion, carburizing, metal bonding and homogenization; recrystallization and grain growth, age hardening, nitriding, internal oxidation; heat treatment of steel; laboratory experiments and demonstrations.

Prerequisite: MEC 210.

MEC 235—Hydraulics and Pneumatics 3 3* 4

The basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits and motors, controls, electro-hydraulic servomechanisms, plumbing, filtration, accumulators and reservoirs.

Prerequisite: PHY 102.

MEC 1101—Machine Shop Theory and Practice 3 12 7

An introduction to the machinist trade and the potential it holds for a craftsman. Deals primarily with the identification, care, and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes of lathe, drill press, grinding (off-hand) and milling machines will be introduced both in theory and practice.

MEC 1102—Machine Shop Theory and Practice 3 12 7

Advanced operations in layout tools and procedures, power sawing, drill press, surface grinder, milling machine shaper. The student will be introduced to the basic operations on the cylindrical grinder and will select projects encompassing all the operations, tools and procedures thus far used and those to be stressed throughout the course.

Prerequisite: MEC 1101.

MEC 1103—Machine Shop Theory and Practice 3 12 7

Advanced work on the engine, lathe, turning, boring, and threading machines, grinders, milling machines and shapers. Introduction to basic indexing and terminology with additional processes on calculating, cutting and measuring of spur, helical, and worm gears and wheels. The trainee will use precision tools and measuring instruments such as vernier height gauges, protractors, comparators, etc. Basic exercises will be given on the turret lathe and on the tool and cutter grinder.

Prerequisite: MEC 1102.

MEC 1104—Machine Shop Theory and Practice 3 12 7

Development of class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly and inspection. Additional processes on the turret lathe, tool and cutter grinder, cylindrical and surface grinder, advanced milling machine operations, etc. Special procedures and operations processes and equipment, observing safety procedures faithfully and establishing good work habits and attitudes acceptable to the industry.

Prerequisite: MEC 1103.

MEC 1112—Machine Shop Processes 0 6 2

To acquaint the student with the procedures of layout work and the correct use of hand and machine tools. Experience in the basic fundamentals of drill press and lathe operations; hand grinding of drill bits and lathe tools; set-up work applied to the trade. For welding students.

MEC 1120—Duct Construction and Maintenance 3 6 5

Study of various duct materials including sheet steel, aluminum, and fiber glass. Safety, sheet metal hand tools, cutting and shaping machines, fasteners and fabrication practices, layout methods, and development of duct systems. The student will service various duct systems and perform on the site repairs including ducts made of fiber glass. A study is made of duct fittings, dampers and regulators, diffusers, heater and air washers, fans, insulation, and ventilating hoods.

Prerequisites: DFT 1116, AHR 1123. Corequisite: AHR 1126.

MUSIC

MUSIC 101—Introduction to Music 3 0 3

A non-technical course in music appreciation. Musical elements such as rhythm, harmony, tone, color, and form are analyzed and discussed. Musical masterworks are employed to develop an understanding of the role of music in contemporary culture.

MUSIC 102—History of Music 3 0 3

A non-technical course in music appreciation. The growth of music from its beginning to the Modern Era. Representative works of various composers and periods are presented for analysis and discussion.

MUSIC 103, 104, 105—College Chorus 0 2 1

A study of vocal techniques and choral interpretation. Ensemble singing including the performance of works from standard choral repertory. Voice range audition is required of all students. Attendance at rehearsals and performance is expected. The course is open to all students. Meets two hours per week for one credit.

MUSIC 203, 204, 205—College Chorus 0 2 1

A continuation of MUSIC 103, 104, 105.

PHILOSOPHY

PHI 201, 202—Introduction to Philosophy I, II 3 0 3

A study of the fundamental problems of philosophy, emphasizing the importance of philosophical thinking for man's everyday experience: an examination of typical ideas and systems of ideas throughout history.

PHYSICAL EDUCATION

MEN

PHY ED 101—Soccer, Touch Football, and Physical Fitness (Fall Quarter) 0 2 1

The course consists of a physical fitness testing program at the beginning of the quarter. The fundamentals of soccer and touch football are taught with emphasis on skills and knowledge of the rules. Written and skill tests are given each quarter to help evaluate the students' progress.

PHY ED 102—Stunts, Tumbling, Wrestling, and Physical Fitness (Winter Quarter) 0 2 1

Physical fitness tests are given to each student. The fundamentals of stunts and tumbling are tought at the beginning of the course. The course ends with wrestling fundamentals.

PHY ED 103—Softball, Golf, and Physical Fitness (Spring Quarter) 0 2 1

Physical fitness tests are given to each student. Softball and golf fundamentals, rules and game situations are taught.

WOMEN

PHY ED 101—Soccer, Speedball, and Physical Fitness (Fall Quarter) 0 2 1

The fundamental techniques and skills of the games will be taught. For evaulation purposes, written and skill tests will be given. Physical fitness will be an integral part of the program throughout the year.

PHY ED 102—Stunts and Tumbling, Bowling, and Physical Fitness 0 2 1

The basic fundamental techniques and skills of gymnastics and the game of bowling will make up the winter program.

PHY ED 103—Softball, Archery, and Badminton (Spring Quarter) 0 2 1

The fundamental techniques and skills of softball, archery, and badminton will be emphasized along with rules and game situations.

MEN

PHY ED 201—Volleyball, Badminton, and Physical Fitness. (Fall Quarter) 0 2 1

The physical fitness program is continued from the freshman year of physical education. The fundamentals of volleyball and badminton are taught with emphasis on skills and knowledge of the rules.

PHY ED 202—Table Tennis, Shuffleboard, Bowling, and Physical Fitness (Winter Quarter) 0 2 1

The physical fitness program is continued. Emphasis is placed on the carry-over value of these sports for lifetime.

PHY ED 203—Tennis, Track, and Field, and Physical Fitness (Spring Quarter) 0 2 1

Individual sports are emphasized this quarter. The skills and rules of archery and tennis are taught. The physical fitness program is continued.

WOMEN

PHY ED 201—Golf, Volleyball, and Physical Fitness (Fall Quarter) 0 2 1

The fundamental skills and techniques of golf and volleyball will make up the program.

PHY ED 202—Table Tennis, Shuffleboard, Advanced Stunts and Tumbling (Winter Quarter) 0 2 1

The games of table tennis and shuffleboard emphasizing skills and techniques will be taught. Advanced gymnastics will complete our winter program.

PHY ED 203dTennis, Track, and Field, and Physical Fitness (Spring Quarter) 0 2 1

The game of tennis including the skills and techniques of the game will be taught. Track and field will include many and varied running, jumping, and throwing events.

PHY ED 205—Personal and Community Hygiene 3 0 3

The study of hygiene and the application of medical science to personal and community living.

PHY ED 104—Basic Swimming (Coed) 0 3 1

Basic concerns and principles of aquatic locomotion, adjustment to water, breathing, floating, the five basic strokes in swimming (breast stroke, back stroke, side stroke, front crawl, back crawl) and standing dive are taught. Water safety is emphasized to the students throughout the course.

PHY ED 204—Advanced Tennis (Coed) 0 3 1

Fundamentals and techniques are reviewed. Knowledge of rules, etiquette, court position, strategy, offensive and defensive play are taught. Rules and regulations for tournament play are explained.

PHYSICAL SCIENCE

PHY SCI 101—Physics Survey 2 2 3

The beginning course of physical science includes a study of physics. Some of the topics of discussion are measurement, forces, gravity, mechanics, heat, light, sound, electricity, and atomic properties.

PHY SCI 102—Chemistry Survey 2 2 3

Included in this course are general discussions of the basic concepts of chemistry and the properties of elements. Topics of discussion include the following: chemical processes, water, ionization, nitrogen, the halgene, sulfur, carbon and silicon, and organic and food chemistry.

PHY SCI 103—Meterology-Geology-Astronomy 2 2 3

Topics for consideration are atmosphere, weather, erosion, rocks, earth's past, the solar system, the Milky Way, and extragalactic systems.

PHYSICS

PHY 101—Mechanics 3 2 4

An introductory course in physics designed for the technically oriented student covering measurement both in English or metric system, vectors, linear forces, Newton's laws, energy, and rotational forces.

PHY 102—Properties of Matter and Heat 3 2 4

This course includes the study of gas, solids, and liquids under varied conditions. Heat and thermodynamic investigations are discussed. The course closes with an investigation into the history and basic properties of nuclear and atomic physics.

PHY 103—Electricity 3 2 4

Electrostatics, magnetism and current electricity are the subjects covered in this course. Topics such as meters, induction, transformers, Ohm's laws and Kirchoff's laws are discussed in detail.

PHY 104—Light and Sound 3 2 4

Light and sound are the two areas which constitute this course. Concepts of interference, Doppler effect, particle and wave theories of light, and spectra classification are some of the main topics discussed.

PHY 106—Applied Mechanics 5 0 5

Concepts and principles of statics and dynamics. Parallel concurrent and noncurrent force systems in coplanar and noncoplanar situation. Concepts of centroids and center of gravity, moments of inertia, fundamentals of Kinetics, and kinematics of velocity and motion.

Prerequisites: MAT 103, PHY 102.

PHY 201—General Physics I 3 2 4

This course designed primarily for physics and engineering (and technology) majors includes in the first quarter of study the following: machines and vector analysis, partial and rigid body mechanics, statics, and rotary motion.

PHY 202—General Physics II 3 2 4

Second quarter of general physics includes the study of heat, sound, light, wave motions, and optics.

Prerequisite: PHY 201.

PHY 203—General Physics III 3 2 4

Final quarter of general physics includes the study of electricity, magnetism, atomic and nuclear physics.

Prerequisite: PHY 202

PHY 1101—Applied Science 3 2 4

An introduction to physical principles and their application in industry. Topics in this course include measurement; properties of solids, liquids, and gases; basic electrical principles.

PHY 1102—Applied Science 3 2 4

The second in a series of two courses of applied physical principles. Topics introduced in this course are heat and thermometry, and principles of force, motion, work, energy, and power.

Prerequisite: PHY 1101.

POLITICAL SCIENCE

POL SCI 201—American National Government 3 0 3

A study of the formation and development of the national government, its organization, functions and powers.

POL SCI 202—American State and Local Government 3 0 3

A study of the organization, functions, and powers of state and local government in the United States.

PSYCHOLOGY

PSYCH 101, 102—General Phychology I, II 3 0 3

An introductory survey of psychology. Topics include pre- and post-natal development, the structure and functions of the nervous systems and glands, sensory organs and processes, intelligence, aptitudes and abilities, perception, motivation, learning, emotion, personality, and adjustment.

PSYCH 110—Human Relations in Management 3 0 3

A behaviorial science approach to business. Management problems related to motivation, communication, organization, balance and change; recognition and analysis of problems in human interaction.

PSYCH 201, 202—Human Development I, II 3 0 3

Development of the normal child and adolescent, with consideration of the social, biological and cultural influences upon growth. Two quarters.

Prerequisite: PSY. 101, 102.

PSYCH 1101—Human Relations 3 0 3

A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

RELIGION

REL 101—Introduction to Old Testament 3 0 3

A survey of the Old Testament designed to introduce the student to the history, literature and religion of the ancient Hebrews.

REL 102—Introduction to New Testament 3 0 3

An examination of the New Testament intended to introduce the student to the Jewish background, the historical setting, the purpose, and the major ideas of this literature. Special emphasis will be given to the significance of the ministry of Jesus and the Apostle Paul.

REL 103—Survey of the Prophecies 3 0 3

A study of the background, personal characteristics, function, message, contribution, and present significance of the Hebrew prophets.

REL 205—Comparative Religion 3 0 3

A comparative study of the major religions of the world, both ancient and modern. An analysis of major religious concepts with attention given to the effects on contemporary history.

Prerequisite: sophomore standing or permission of the instructor.

SAFETY

SAFETY 1101—Safety and First Aid (Vocational) 2 0 2

Principles and practices as applied to emergency first aid, study of safety procedures and techniques as related to vocational training with the teaching emphasis placed on accident prevention.

SOCIOLOGY

SOC 201—Introduction to Sociology 3 0 3

A study of the fundamental principles and concepts of sociology, with emphasis on contemporary American institutions in relation to technological change, ethnic groups, population trends and social control.

SOC 202—Marriage and the Family 3 0 3

A study of the family as a social institution—its origins and development, its forms and functions, its interrelation with other social institutions, and its role in contemporary civilization. In connection therewith, a study is made of sex development, differentiations, social relationships between the sexes, and factors contributing to or mitigating against successful, stable marriages.

SPANISH

SPA 101, 102, 103—Elementary Spanish I, II, III 2 3 3

An introduction to Spanish, with a modern, audio-lingual approach. Up-to-date materials and methods are used. Emphasis first on hearing and speaking, then on reading and writing. Lab work is required as part of the course for those with no previous Spanish or those who do not make satisfactory score on Spanish placement tests. Three quarters.

SPA 151, 152, 153—Intermediate Spanish I, II, III 2 3 3

A review of the skills of hearing, speaking, reading and writing. Audio-lingual work in class and in lab. Selected supplementary readings. Three qcarters.

Prerequisites: Two units of high school Spanish and a satisfactory placement test score, or SPA 101, SPA 102, and 103.
SPA 201, 202, 203—Survey of Spanish

SPA 201, 202, 203—Spanish Civilization I, II, II 3 0 3

A study of Spanish culture and civilization. Selected readings in the literature of Spain and Spanish America from the Middle Ages to the present. Parallel reading and reports. Three quarters.

Prerequisite: Permission of instructor.

SPEECH

SPEECH 101—Fundamentals of Speech I 3 0 3

This course involves the study and application of the fundamentals of extemporaneous speaking. Consideration of the mechanics of speech is involved with emphasis on oral reading as a means of improving voice and articulation. The development of proficiency in public speaking is encouraged through an introduction to the informative speech, the persuasive speech and group discussion. Students use audio aid in weekly laboratory sessions at the Communication Center.

SPEECH 102—Speech II 3 0 3

A study of oral interpretation of literature including the ballad, lyric and narrative poetry, the article and short story; dramatic reading from Shakespeare, Bible, and other sources, and an introduction to the principles of argumentation and debate.

WELDING

WLD 1101—Basic Gas Welding 0 3 1

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding, bronze welding, silver-soldering, and flame-cutting methods applicable to mechanical repair work.

WLD 1112—Mechanical Testing and Inspection 1 3 2

The standard methods for mechanical testing of welds. The student is introduced to the various types of tests and testing procedures and performs the details of the test which will give adequate information as to the quality of the weld. Types of tests to be covered are: bend, destructive, free-bend, guided-bend, nick-tear notched bend, tee-bend, nondestructive, V-notch, Charpy impact,etc.

Prerequisites: WLD 1120, WLD 1121.

WLD 1120—Oxacetylene Welding and Cutting 3 12 7

Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, assembly of units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead position, brazing, hard and soft soldering. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. Students perform mechanical testing and inspection to determine quality of the welds.

WLD 1121—Arc Welding 3 12 7

The operation of AC transformers and DC motor generator arc welding sets. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weaknesses in welding. Safety procedures are emphasized throughout the course in the use of tools and equipment.

WLD 1122—Commercial and Industrial Practices 3 9 6

Designed to build skills through practices in simulated industrial processes and techniques: sketching and laying out on paper the size and shape description, listing the procedure steps necessary to build the product, and then actually following these directions to build the product. Emphasis is placed on maintenance, repairing worn or broken parts by special welding applications, field welding and nondestructive test and inspection.

Prerequisites: WLD 1120, WLD 1121.

WLD 1123—Inert Gas Welding 1 3 2

Introduction and practical operations in the use of inert-gas-shield arc welding. A study will be made of the equipment, operation, safety and practice in the various positions. A thorough study of such topics as: principles of operation, shielding gases, filler rods, process variations and applications, manual and automatic welding.

Prerequisites: WLD 1120, WLD 1121.

WLD 1124—Pipe Welding 3 12 7

Designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code.

Prerequisite: WLD 1121.

WLD 1125—Certification Practices 3 6 5

This course involves practice in welding the various materials to the guided bend and the tensile strength tests to check the quality of meet certification standards. The student uses various tests including his work. Emphasis is placed on attaining skill in producing quality welds.

Prerequisites: WLD 1120, WLD 1121, WLD 1123, WLD 1124.

CORRESPONDENCE DIRECTORY

For further information, inquiries in specific areas should be addressed to the office indicated at Surry Community College, Dobson, N. C. 27017.

Administrative Matters and General Information ..... **President**

Business Matters ..... **Business Manager**

Admissions, Catalogs ..... **Dean of Student Personnel**

Records, Transcripts ..... **Registrar**

Public Relations ..... **President**

Academic Information ..... **Academic Dean**

Placement ..... **Dean of Student Personnel**

Financial Aid ..... **Director of Financial Aid**

Evening Classes ..... **Associate Dean and Director of Evening Programs**

High School Completion .. **Director of Adult and Continuing Education**

Extension Classes ..... **Director of Adult and Continuing Education**

TELEPHONE

Area Code 919

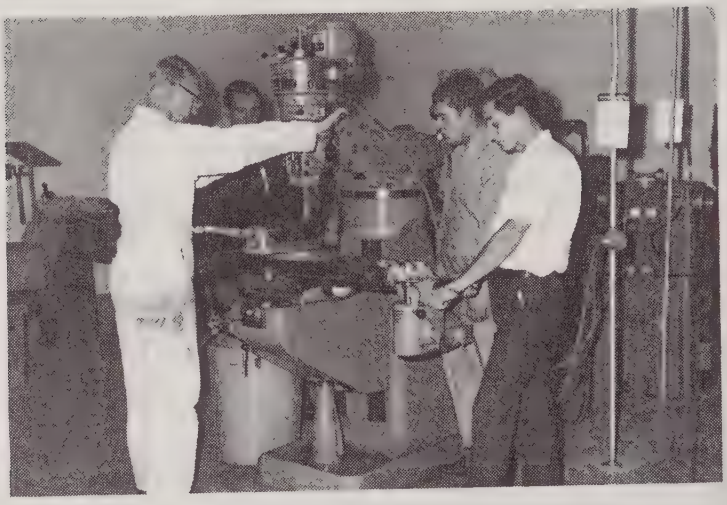
386-1015

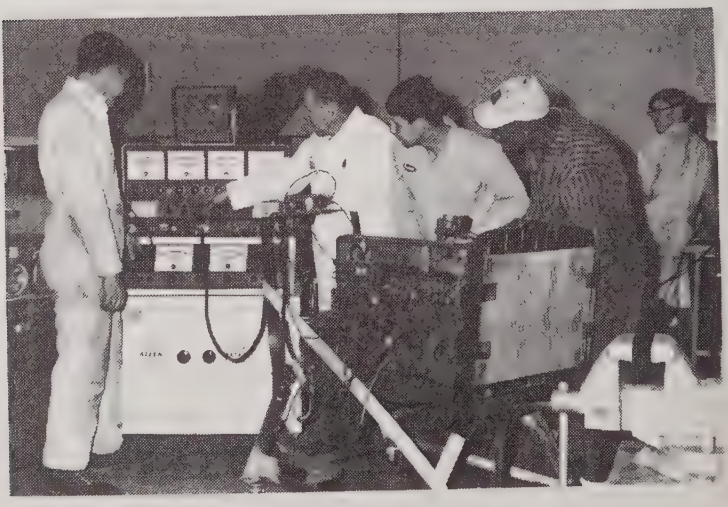
Dobson, N. C.

OFFICE HOURS

8:30 A. M. — 9:30 P. M., Monday through Thursday

8:30 A. M. — 5:00 P. M., Friday





Dobson, N. C.
Permit No. 10

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EVENING DIVISION AND CONTINUING EDUCATION BULLETIN

Fall Quarter

1970-71

Surry Community College

Dobson

North Carolina

GENERAL INFORMATION

Evening Division

Surry Community College offers evening courses for those who desire:

1. College credit toward a two-year Associate in Arts or Associate in Applied Sciences degree.
2. College credit courses to meet on-the-job professional requirements or for transfer to a four-year college.
3. Courses to meet specific job or interest needs.

Application

Application is made through the Evening Division Office or through the Admissions Office. New students are urged to consult a representative of one of these offices before the formal registration period.

Admission

The college operates under an open door admissions policy. In general, the requirements are that the applicant be 18 or over and have the ability to profit from attendance. High school graduation or its equivalent is required for admission to certain programs. The Adult and Continuing Education Division of the college offers a high school completion program. For answers to specific admissions questions, the applicant should consult the Evening Director or a counselor, and he should carefully read the admissions section of the general college bulletin.

Credits

Courses offered in the evening parallel those in the day program and carry the same college credit. Day and evening classes are frequently taught by the same instructors.

The college operates on the quarter system; one class hour per week is equal to one quarter hour of credit.

Withdrawal

Should a student find it necessary to withdraw from the college or to withdraw from a course, he must withdraw officially at the college office. Failure to attend class or merely giving notice to an instructor will not be considered an official withdrawal and may result in a failing grade for the course. Complete academic regulations are listed in the regular college bulletin. Each student should read these regulations carefully.

CALENDAR

September 8 (Tuesday)	**Registration 6:00 - 8:00 p.m.**
September 9 (Wednesday)	**Registration 6:00 - 8:00 p.m.**
September 10 (Thursday)	**Classes Begin**
September 17 (Thursday)	**Last night to enroll or add classes**
October 8 (Thursday)	**Last night to drop without academic penalty**
November 19 (Thursday— November 25 (Wednesday)	**Fall quarter examinations**

FEES

College Parallel	
N. C. Resident	**$3.00 per credit hour**
Non-Resident	**$7.50 per credit hour**
Technical and Vocational	
N. C. Resident	**$2.50 per credit hour**
Non-Resident	**$6.25 per credit hour**
College fee	**$3.00 per quarter**
Late Registration Fee	**$2.00**

NOTE

For further academic information such as course descriptions and prerequisites, please consult the general college bulletin.

All evening offerings are subject to sufficient enrollment.

EVENING DIVISION
SURRY COMMUNITY COLLEGE
Fall Schedule, 1970-71

Course No.	Course Title	Hours	Days	Credit Hours
ART 131	Drawing I	7-10	Th	3
ART 201	Painting I	7-10	Tu	3
AUT 1111A	Internal Combustion Engines	7-10	MW	4
BIO 101	General Biology I	7-10	TuTh	4
BUS 101	Typewriting I	6-8:30	MW	3
BUS 103	Typewriting II	6-8:30	MW	3
BUS 105	Business Mathematics	6-8:30	MW	5
BUS 106	Shorthand I	7-9:30	TuTh	4
BUS 110	Office Machines I	8.30-10:30	MW	3
BUS 111	Office Machines II	8:30-10:30	MW	3
BUS 131	Principles of Accounting I	7-9:30	MW	3
BUS 180M	Medical Term & Vocabulary I	7-10	Tu	3
BUS 214	Secretarial Procedures	7 9:30	TuTh	4
BUS 251	Cost Accounting I	7-9:30	TuTh	3
CHM 101	General Chemistry I	7-10	TuTh	4
DFT 101	Technical Drafting I	7-10	MW	2
DFT 1104	Blueprint Reading: Mechanical	9-12	Sat	1
DFT 201	Technical Drafting IV	6-10	TuTh	4
EDP 104	Intro. to Data Processing	7-9:30	MW	4
ELC 101A	Fundamentals of Electricity I	7-10	TuTh	3
ELC 1112A	Direct & Alternating Current	7-10	TuTh	4
ENG 100	Developmental Reading I	7-8:30	MW	1
ENG 101	Freshman English I	7-10	M	3
ENG 201	English Literature I	7-10	M	3
HIS 101	Hist of Western Civilization I	7-10	Th	3
HIS 201	American History I	7-10	Th	3
MAT 080	Remedial Mathematics	7-10	M	0
MAT 101	College Mathematics I	7-10	Tu	3
MAT 103	College Mathematics III	7-10	W	3
MAT 105	Col. Algebra & Trig.	7-9:30	TuTh	5
MEC 1101A	Mach. Shop Theory & Prac. I	7-10	TuTh	4
PHY 101	Mechanics	7-10	MW	4
PSY 101	General Psychology I	7-10	M	3
SPA 101	Elementary Spanish I	7-10	Th	3
WLD 1120A	Oxyacetylene Weld. & Cutting I	7-10	TuTh	4

SURRY COMMUNITY COLLEGE
ult and Continuing Education Division
Fall Quarter

ourse Title	Hours	Days
IVE ARTS		
nning Art	6:30-9:30	Monday
nced Art	6:30-9:30	Tuesday
ESS EDUCATION		
keeping for Personal Use	6:30-9:30	Monday
ness Writing	6:30-9:30	Tuesday
ng for Personal Use	6:30-9:30	Thursday
AL ACADEMIC EDUCATION		
ern Math for Parents	6:30-9:30	Monday
is Man?	6:30-9:30	Tuesday
umer Education	6:30-9:30	Thursday
tments and Sec., Stock Mkt.	6:30-9:30	Monday
AGE ARTS		
d Reading Techniques	6:30-9:30	Tuesday
tive Writing	6:30-9:30	Tuesday
ature	6:30-9:30	Thursday
Old Testament as Literature	6:30-9:30	Monday
IAKING		
Decorating	6:30-9:30	Tuesday
er Arranging	6:30-9:30	Tuesday
for Household Repairs	6:30-9:30	Wednesday
ior Decorating	6:30-9:30	Monday
ning Knitting	6:30-9:30	Thursday
ng for Beginners	6:30-9:30	Monday
lstery	6:30-9:30	Tuesday
nics	6:30-9:30	Thursday
EDUCATION		
County History	6:30-9:30	Monday
d Affairs	6:30-9:30	Tuesday
ICAL AND TECHNICAL SUBJECTS		
cides	6:30-9:30	Monday
lizers and Lime	6:30-9:30	Tuesday
or Maintenance & Tune-Ups	6:30-9:30	Wednesday
s and Landscaping	6:30-9:30	Monday
Estate	6:30-9:30	Tuesday
Aid	6:30-9:30	Thursday
Masonry	8:00-12:00(AM)	Saturday
print Reading	6:30-9:30	Tuesday
ing	8:00-12:00(AM)	Saturday
ng Machine Repairman	6:30-9:30	Tuesday
uretor Repair	6:30-9:30	Thursday
Management	6:30 9:30	Thursday
culture	6:30-9:30	Monday
asic Education	For information, call 386-8121	
hool Completion	For information, call 386-8121	

for any of the listed courses by calling the college office, ., and ask that your name be placed on the class roll. You will ied by mail of the beginning date.

BULK RATE
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Dobson, N. C.
Permit No. 10

Surry Community College
Dobson, N. C. 27017
Phone 386-8121

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Surry Community College

'71-'73

SURRY COMMUNITY COLLEGE

BOARD OF TRUSTEES

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William Allen, Jr.	Elkin, North Carolina
Mrs. Hugh G. Chatham	Elkin, North Carolina
Foy Clark	Mount Airy, North Carolina
Frank Comer	Dobson, North Carolina
Charles L. Folger	Dobson, North Carolina
Thomas L. Folger	Mount Airy, North Carolina
John P. Frank	Mount Airy, North Carolina
Robert M. Lowe	Lowgap, North Carolina
Robert E. Merritt	Mount Airy, North Carolina
Oscar Smith	Pilot Mountain, North Carolina
Robert Yarborough	Jonesville, North Carolina

COLLEGE PERSONNEL

ADMINISTRATION

I. JOHN KREPICK	President
JAMES H. TEMPLETON	Academic Dean
GEORGE E. STOCKTON	Dean of Student Personnel
H. CLYDE JOHNSON	Business Manager
CARLOS P. SURRATT	Associate Dean and Director of Evening Programs
RAYMOND C. FREEMAN	Director of Learning Resources
JAMES M. REEVES	Director of Adult and Continuing Education
JACK M. FANNON	Assistant Director of Adult and Continuing Education
RUTH THOMPSON	Registrar and Counselor
CLAUDE V. AYERS	Counselor and Director of Financial Aid
C. WAYNE MOTSINGER	Counselor and Director of Student Activities

SURRY COMMUNITY COLLEGE

CATALOG 1971-1973

Established by authority of the 1963
General Assembly under Chapter 115A.
General Statutes of North Carolina

ACCREDITED BY SOUTHERN ASSOCIATION
OF COLLEGES AND SCHOOLS

Box 304, Dobson, North Carolina 27017
Telephone 386-8121 (Area Code 919)

Surry Community College Bulletin, Volume IV, Number 1,
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COLLEGE CALENDAR 1971-72

FALL QUARTER 1971-72

September 1 and 2 — Wednesday-Thursday ..... Faculty Workshop
September 7 and 8 — Tuesday and Wednesday ..... Registration
September 9 — Thursday ..... Classes Begin
September 16 — Thursday ..... Last day to add classes
October 8 — Friday ..... Last day to drop without academic penalty
October 15 — Friday ..... Mid-term reports
November 17-24 — Thursday-Wednesday .... Fall Quarter Examinations
November 25 and 26 — Thursday and Friday .... Thanksgiving Holidays

WINTER QUARTER 1971-72

November 29 — Monday ..... Registration
November 30 — Tuesday ..... Classes Begin
December 7 — Tuesday ..... Last day to add classes
December 20 — Monday ..... First day of Christmas Holidays
January 3 — Monday ..... Classes Resume
January 7 — Friday ..... Last day to drop without academic penalty
January 14 — Friday ..... Mid-Term Reports
Feb. 28-March 3 — Monday-Friday ..... Winter Quarter Examinations

SPRING QUARTER 1971-72

March 6 — Monday ..... Registration
March 7 — Tuesday ..... Classes Begin
March 14 — Tuesday ..... Last day to add classes
March 31 — Friday ..... First day of Easter recess
April 5 — Wednesday ..... Classes Resume
April 14 — Friday ..... Last day to drop without academic penalty
April 21 — Friday ..... Mid-Term Reports
May 19-25 — Friday-Thursday ..... Spring Quarter Examinations
May 26 — Friday ..... Graduation

SUMMER QUARTER 1971-72

June 1 and 2 — Thursday-Friday ..... Registration for First Session
June 5 — Monday ..... First Session Begins
July 4 — Tuesday ..... Holiday
July 10 — Monday ..... First Session Ends
July 13 and 14 — Thursday and Friday .... Registration-Second Session
July 17 — Monday ..... Second Session Begins
August 18 — Friday ..... Second Session Ends
August 18 — Friday ..... Graduation

COLLEGE CALENDAR 1972-73

FALL QUARTER 1972-73

September 1 — Friday ..... Faculty Workshop
September 5 and 6 — Tuesday and Wednesday ..... Registration
September 7 — Thursday ..... Classes Begin
September 14 — Thursday ..... Last day to add classes
October 6 — Friday ..... Last day to drop without academic penalty
October 13 — Friday ..... Mid-term reports
November 16-22 — Thursday-Wednesday ..... Fall Quarter Examinations
November 23 and 24 — Thursday and Friday ..... Thanksgiving Holidays

WINTER QUARTER 1972-73

November 27 — Monday ..... Registration
November 28 — Tuesday ..... Classes Begin
December 4 — Monday ..... Last day to add classes
December 22 — Friday ..... Last day to drop without academic penalty
December 20 — Wednesday ..... First day of Christmas Holidays
January 3 — Wednesday ..... Classes Resume
January 12 — Friday ..... Mid-term reports
Feb. 26-March 2 — Monday-Friday ..... Winter Quarter Examinations

SPRING QUARTER 1972-73

March 5 — Monday ..... Registration
March 6 — Tuesday ..... Classes Begin
March 13 — Tuesday ..... Last day to add classes
March 30 — Friday ..... Last day to drop without academic penalty
April 6 — Friday ..... Mid-term reports
April 20 — Friday ..... First day of Easter Recess
April 25 — Wednesday ..... Classes Resume
May 17-23 — Thursday-Wednesday ..... Spring Quarter Examinations
May 25 — Friday ..... Graduation

PHILOSOPHY AND PURPOSE

Surry Community College is dedicated to the belief that each person should have the privilege to develop and extend his skills and knowledge together with the opportunity to increase the awareness of his role and responsibility in society. "To each his farthest star" is the appropriate motto.

The college serves the comprehensive educational needs of adults and area high school graduates in Surry County and the surrounding area through the following principles:

—Open door admission with testing, counseling, and selective placement in order that each student will have the best possible opportunity to start where he is and go as far as he can.

—Upon completion of his program, the assurance that the student will have had the quality of instruction and will have completed the curriculum that will make it possible for him to meet successfully the demands of the job or the continuing education for which he has prepared.

Under Chapter 115A of the General Statutes of North Carolina, the college meets its responsibilities by offering the following strong programs:

—Developmental studies for those students who have deficiencies in the area they wish to pursue at college level.

—Two-year college program for transfer to four-year institutions.

—Two-year technical education appropriate to the needs of the individual and the community.

—Vocational education for those desiring to upgrade themselves in their chosen vocation or who wish to learn new skills or a new trade.

—Varied educational programs for adults who wish to improve their personal efficiency, enrich their cultural lives, or develop education skills.

HISTORY

Long before the publications of the Carlyle Report citizens of Surry County became interested in establishing a community college in the area. In 1962 the Mount Airy Lions Club appointed a committee of five members to study the possibilities and to communicate with the Division of Higher Education in Raleigh. In 1962, the committee was expanded to include all major civic groups in the county.

Local newspapers and radio stations endorsed the project and expressed wholehearted approval. By May, 1963, interest in a community college had reached a point that a county-wide meeting was held in Dobson to discuss procedural steps. Following the meeting, the Surry County Board of Commissioners and the Boards of Education of the Elkin City Schools, the Mount Airy City Schools, and the Surry County Schools endorsed the community college project. Steps were taken to initiate a county-wide study.

The Surry County Board of Commissioners appointed a Community College Steering Committee on August 5, 1963, composed of fourteen members. This committee voted unanimously to complete the county survey and to submit an application to the State Board of Education at its December meeting for a comprehensive community college for Surry County. The application was submitted and approved by the State Board on January 9, 1964. On November 2, 1964, I. John Krepick was elected President of the Surry Community College.

FACILITIES

The college facilities, located in Dobson, North Carolina, include four major structures—a science-technical building, shop building, learning resources building, and physical education-classroom building.

ACCREDITATION

Surry Community College is accredited by the Southern Association of Colleges and Schools and by the North Carolina State Board of Education.

The College is a member in good standing of the American Association of Junior Colleges, the North Carolina Association of Colleges and Universities and the Southern Association of Junior Colleges.

ADMISSIONS POLICY

Surry Community College is an "open-door" college and is not bound by restrictive admissions policies insofar as admission tests are concerned. It is the feeling of the college staff that secondary school records more accurately predict college success than any other criteria. However, since college transfer students will, in some cases, need the scholastic aptitude test for transfer, it is recommended that prospective college parallel students take this test while in high school.

The College will administer various tests which assist in the placement of students in the most suitable program. A personal interview with an admissions officer will aid the student to determine his specific educational objectives. Where scores on tests indicate a lack of readiness to commence college-level work, the student will be assigned to a developmental studies program or to a learning laboratory. Most curricula require high school graduation or equivalent.

APPLICATION PROCEDURES

1. Complete an application and enclose a $10 application fee to the Admissions Office. This fee will be applied toward the tuition for the first quarter of college attendance. Students are urged to submit applications well in advance of the quarter which is selected for enrollment.
2. Upon receipt of the application the prospective student will receive detailed instructions regarding admission procedures.
3. Beginning students should request their high school to forward a transcript of their work to the Admissions Office.

4. Students transferring from another college will be accepted at the discretion of the Admission Office. Transfer students should request official transcripts of all work attempted elsewhere. Such transcripts must be sent directly to Surry Community College.

TRANSFER CREDIT

Students transferring from other colleges must furnish official transcripts of records from all institutions attended. "D's" will be accepted if a student has a two point or "C" average on all work transferred into Surry Community College. Courses satisfactorily completed in other accredited institutions are evaluated in terms of the program selected at Surry Community College. Effective: September 1, 1971.

COUNSELING SERVICE

The prospective student will be given the opportunity to discuss his program with a professional counselor. Most full-time students will be required to arrange such an interview after transcripts have been received and analyzed.

STUDENT CONDUCT

The conduct of college students, both in and out of school, is expected to be that of any respectable adult in a public place. Students should consider at all times that the reputation of the institution depends in no small part upon their behavior. No long list of regulations and penalties should be necessary if each student abides by the rules of common courtesy and cooperation. Specific regulations and official policies are listed in the student handbook. The college reserves the right to dismiss any student who in its judgment conducts himself in a manner incompatible with the purposes of the college.

GUIDANCE

Guidance of the student begins with the admissions interview. Immediately after registration, students meet with the faculty in their major course of study for an orientation to the entire curriculum. Each student is assigned to a faculty adviser who helps him select his courses in subsequent quarters. Students are invited to discuss their personal and classroom problems, as well as their educational and vocational plans with any member of the college staff, as well as with the office of Student Personnel. The Student Personnel office helps students in all matters pertaining to transfer.

Students who need specialized, individual counseling service beyond that provided by faculty advisers may be referred to the Student Personnel office. Students are invited to use the center for help in reading difficulties.

CO-CURRICULAR ACTIVITIES

The College recognizes that a well-balanced education program provides some time for social, cultural, and recreational activities. The office of the Dean of Student Personnel coordinates this aspect of college life. The Student Government Association is composed of all students.

Members to Student Government Council are elected from various curriculums. The purpose of the Student Government Association shall be to provide means for responsible student participation in the entire program of student affairs.

SCHOLARSHIPS

Surry Community College Foundation, Inc., was formed in 1966 under the guidance of the college trustees. Through the efforts of the directors of this non-profit organization contributors are solicited to aid students financially. Financial aid is made possible by business firms and individuals who have contributed funds to the College Foundation.

EDUCATIONAL OPPORTUNITY GRANTS PROGRAM

A limited number of Educational Opportunity Grants will be available to students who qualify under Title IV, Part A, of the Higher Education Act of 1965 (Public Law 89-329). The grants are made on the basis of need and ability. Applications should be completed and mailed to the college before July 15 of the year that Financial Aid Assistance is needed. Recipients of these awards will be notified before fall registration.

WORK-STUDY PROGRAMS

Part-time jobs are available on campus for students wishing to earn a part of their expenses. Jobs are assigned by the Student Personnel office to those students who are most urgently in need of help. In the assignment of part-time jobs, consideration is given to such factors as scholarship, financial need, and willingness to work.

JOB PLACEMENT

The college maintains a placement service in the counseling department for students who wish to secure part-time or full-time employment while attending college, during vacations or after graduation. Occupational information on job requirements and opportunities is provided in the counseling office.

OFFICIAL TRANSCRIPTS

Upon request of the student, an official transcript of his record at Surry Community College will be sent to any college or university, or to the student.

Each student is entitled to one official transcript of his work at

no cost, provided all accounts with the College have been settled satisfactorily. A fee of $1.00 is charged for each additional transcript.

RESIDENCE

The tuition for legal residents of North Carolina is less than that of non-residents. The following should be helpful in determining residency.

—A legal resident must have maintained his domicile in North Carolina for at least six months prior to his initial enrollment.

—The legal residence of a person under 21 years of age is the same as that of his parents or legal guardian.

—Married students under 21 years of age must have maintained their domicile in North Carolina for at least six months prior to their initial registration. The legal residence of a wife is the same as that of her husband.

If questions arise concerning legal residency, contact the Business Office.

COLLEGE FEE SCHEDULE

Tuition Charges	College Parallel Courses	Technical and Vocational Courses
Application Deposit Fee (Applied toward tuition)	$10.00	$10.00
State resident, full time, 15 hrs.; per quarter	42.00	32.00
State resident, part time, less than 15 hrs; per quarter hour	3.00	2.50
Out-of-State resident, full time, 15 hrs.; per quarter	105.00	80.00
Out-of-State resident, part time, less than 15 hrs.; per quarter hr.	7.50	6.25
Activities fee, payable at registration, per quarter (Full time students	6.00	6.00
(Part time students)	3.00	3.00
Late registration fee (paid in addition to registration fee) Full time	5.00	5.00
Late registration fee (paid in addition to registration fee) Part time	2.00	2.00
Transcript fee (no charge for first copy)	1.00	1.00
Graduation fee	10.00	10.00

Tuition is set by the State Board of Education and is subject to change without notice.

All tuition and fees are due and payable on the day of registration for classes.

Student accident insurance is recommended for full-time students.

Nursing students should consult nursing staff for list of special charges.

Cost of books and supplies will be approximately $100 per year.

REFUND POLICY

Students who must withdraw from a class or a program must arrange to talk with the Dean of Student Personnel. Tuition refund for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds (2/3) of the student's tuition may be refunded if the student withdraws within ten (10) calendar days after the first day of classes as published in the school calendar. Tuition refunds will not be considered for tuitions of five dollars ($5.00) or less. If a course or curriculum fails to materialize, all the tuition shall be refunded.

RE-ADMISSION REFUND

Where a student, having paid the required tuition and fees for a quarter withdraws from the institution before the end of the quarter and the reasons for the withdrawal are found excusable by the institution's administration, the student may be allowed credit for tuition and fees on a pro rata basis if he applies fo re-admission during any of the next four calendar quarters and petitions in writing to be allowed such credit.

VETERANS

Students enrolling at the Community College who wish to use educational benefits under one of the Government bills for veterans should make application to the local Veterans Administration Office. Correspondence obtained or certificates granted should be discussed with the Dean of Student Personnel prior to registration for classes.

REFUND POLICY FOR VETERANS

The following refund policy will be applicable to persons enrolled under provisions of Title 38, U. S. Code, as amended:

The institution has and maintains the following policy for the refund of the unused portion of tuition, fees, and other charges in the event the person fails to enter the course or withdraws or is discontinued therefrom at any time prior to completion.

The amount charged to the person for tuition, fees, and other charges for a portion of the course will not exceed the approximate pro rata portion of the tuition fees, aad other charges that the length of the completed portion of the course bears to its total length.

WITHDRAWAL

A student who withdraws is expected to confer with his adviser and clear through the Registrar and the Buusiness Office. Failure to and clear through the Registrar and the Business Office.

AUDITING COURSES

The auditing of courses is permitted by special arrangement of the Academic Dean and of the instructor involved. Regularly enrolled students may audit courses. Tuition and fees are the same as required credit courses. Auditors receive no credit.

ACADEMIC REGULATIONS

A student must maintain a Cumulative Quality Point Average of 2.0 or better to be in good academic standing.

Student progress is measured by Quality Point Average, or Q.P.A.; the quality of work a student has done at the College through one or more quarters is reflected by his Cumulative Point Average, or C.P.A.

The Quality Point Average is calculated as follows:

1. Allowing 4 points for an A, 3 points for a B, 2 points for a C, 1 point for a D, and 0 points for an F, multiply the number of points equivalent to the letter grade received in each course by the number of credit hours for the course to arrive at the quality points earned in each course.
2. Divide the sum of the quality points by the total number of credit hours of work; the quotient represents the Quality Points Average for the quarter.

The Cumulative Point Average is determined in the same manner as the Quality Point Average. except that all of the student's work at the College is taken into account.

A student making less than 1.5 quality point average following two consecutive quarters is placed on academic probation at which time he is required to consult a counselor.

SYSTEM OF GRADING

The following grading system is used at Surry Community College:

Letter		Description	Quality Points
A		Superior	4
B		Good	3
C		Average	2
D		Passing	1
F		Failing	0
I	Incomplete		0
WP	Withdrawn, passing		0
WF	Withdrawn, failing		0

GRADUATION REQUIREMENTS

Surry Community College grants the Associate in Arts Degree for students who complete a College Transfer Program, the Associate in Applied Science Degree for students who complete a two-year Tech-

nical program, and a vocational diploma for one-year vocational students. All degree candidates must complete the General Education requirements, applicable to their respective programs in addition to other courses for a minimum of 96 quarter hours, 30 of which must be taken at Surry Commuunity College. The student's overall grade point average must be at least 2.0 ("C") on work attempted at Surry Community College.

COMMENCEMENT

Candidates for degrees or diplomas are expected to attend commencement exercises. It is the responsibility of each student to apply to the Student Personnel Office for his degree or certificate at the beginning of the last quarter prior to his program completion. The $10 graduation fee should be paid at this time.

DEVELOPMENTAL STUDIES

MODS (Modern Opportunity Developmental Studies)

This curriculum is based on the learning-oriented system of instruction. It is designed for students who have special needs: intellectually, personally, and socially. The learning-oriented system of instruction meets the needs of students with special emphasis on: Dialogical instruction utilizing audio-visual materials, programmed instructional materials, tutorial aides, and intensive group and individual counseling.

In MODS a student will be evaluated at the end of each quarter by the instructor in terms of his own personal development in the studies. The instructor, in consultation with the division chairman of the discipline—English, Psychology, and Philosophy, etc.—will then award the credits to be received by the student.

NOTE: Experimental beginning 1970-71.

LEARNING LABORATORY

The Learning Laboratory is an important adjunct to the total college instructional program. The program is designed to provide study opportunities in practically any field in which an adult or college student might be interested. In the Lab are numerous programmed instruction courses in English, Reading, Mathematics, Science, Business, Social Studies, Foreign Language, and other disciplines. Programs are designed to meet the needs of individuals at all levels from non-readers to the college graduate. Students may pursue an area of personal interest, or study for the General Education Development Tests. Others may study to remedy an academic weakness, before or after entering college, or to supplement a course

EVENING CLASSES

The College operates an Evening Division for students and adults interested in pursuing a part-time program. College parallel, technical, and vocational courses are available to qualified students. Classes usually meet one night a week from 7:00 to 10:00 p.m. Evening Division bulletins are available in the College office. Interested students should contact the Director of Evening Programs.

COLLEGE PARALLEL DIVISION

College Parallel Studies (Associate in Arts Degree)

In the first two years of college students pursue a program of general education in the areas of humanities, social studies, science, and mathematics. In addition to areas mentioned above, students begin to specialize in work in their own particular fields of interest. Surry Community College provides quality instruction in these areas for transfer credit to senior institutions. The College also provides counseling to help students plan their program for transfer to the college or university of their choice. The student should consult the general regulations relative to admission requirements which apply to all students seeking admission to this College.

SUGGESTED
LIBERAL ARTS PROGRAM

First Year	**Quarter Hours**
English 101 - 102 - 103	9
History 101 - 102 - 103	9
Science Sequence	12
Mathematics 101 - 102 - 103 - or 105 - 106	9-10
Physical Education 101 - 102 - 103	3
Foreign Language or Electives	5-6
	47-49

Second Year	
English 201 - 202 - 203	9
Social Science Electives	6
Humanities	3
Physical Education 201 - 202 - 203	3
Electives	27
	48

SUGGESTED
PRE-ENGINEERING PROGRAM

First Year	Quarter Hours
English 101 - 102 - 103	9
History 101 - 102 - 103	9
Chemistry 101 - 102 - 103	12
Mathematics (Analytic Geometry, Cal. Sequence)	15
Physical Education 101 - 102 - 103	3
	48
Second Year	
English 201 - 202	6
Physics 201 - 202 - 203	12
Engineering Graphics I - II	6
Calculus III	5
Differential Equations	5
Economics 201 - 202 - 203	9
Physical Education 201 - 202 - 203	3
Electives	3
	49

SUGGESTED
PRE-EDUCATION PROGRAM

This transfer program should be planned with the help of the student personnel office. The program selected should be designed to satisfy the requirements of most teacher training senior institutions. The suggested pattern of courses will meet most of the requirements for transfer at the Junior level.

First Year	Quarter Hours
English 101, 102, 103	9
History 101, 102, 103	9
Mathematics 101, 102, 103	9
Sciences Sequence	12
Foreign Language or Elective	6-9
Physical Education 101, 102, 103	3
	48-51
Second Year	
English 201, 202. 203	9
History 201, 202, 203	9
Education 201, 202	6
Speech 101	3
Science Sequence	9-12
Psychology 101, 102	6
Physical Education 201, 202, 203	3
Electives	6
	51-54

SUGGESTED
PRE-BUSINESS ADMINISTRATION PROGRAM

First Year	**Quarter Hours**
English 101 - 102 - 103	9
Science Sequence:	
Biology, Chemistry or Physics	12
Mathematics 101 - 102 - 103 or 105 - 106	9-10
History 101 - 102 - 103	9
Physical Education 101 - 102 - 103	3
Electives	5-6
	47-49

Second Year	
English 201 - 202	6
Social Science Electives	5-6
Economics 201 - 202 - 203	9
Accounting 131 - 132 - 133	9
Speech 101	3
Physical Education 201 - 202 - 203	3
Electives	8-13
	43-49

SUGGESTED
TEACHER AIDE PROGRAM

This program is designed for students who desire a basic liberal arts curriculum with a vocational option. With careful planning, this program should enable a student to transfer into a four-year college or to seek employment as a teacher aide, kindergarten supervisor, or nursery supervisor. Any student entering this curriculum should work closely with a counselor or faculty adviser to assure his taking courses most related to his interest and needs.

First Year	**Quarter Hours**
English 101. 102, 103	9
Psychology 101, 102	6
Mathematics 101, 102, 103	9
Education 201, 202	6
*Education 203 (Seminar)	3
Art 130, 131, 132 or Typing, Office Machines, Speech	9
Physical Education 205 (Health)	3
Electives	3
	48

Second Year	
Music 101, 102, 103	9
Sociology 201, 202	6
Physical Education 101, 102, 103	3
Biology 101, 102, 103 or other Science sequence	12
History 101, 102, 103	9
Philosophy 201	3
*Education 204, Teacher Aide Internship	6
	48

*Courses to be jointly organized and administered by college and advisory committee.

COLLEGE TECHNICAL DIVISION

(Associate In Applied Science Degree)

The programs in the technology areas are designed to prepare students with technical competence for immediate employment in either business, industry, government, the health occupations fields, or as owner-manager of their firms. General education subjects are included as necessary adjuncts to these occupational programs.

Programs of Study

Business Options:

- General Business Management
- Executive Secretarial
- Medical Secretarial
- Legal Secretarial
- Agricultural Buusiness

Technology Options:

- Electronics Technology
- Drafting and Design Technology
- Martin Memorial Nursing Program

GENERAL BUSINESS MANAGEMENT

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 105	Business Mathematics	5	0	5
ECO 201	Economics I	3	0	3
BUS 115	Business Law I	3	0	3
		16	3	17
Second Quarter				
ENG 102	English II	3	0	3
ECO 202	Economics II	3	0	3
BUS 116	Business Law II	3	0	3
BUS 101	Introduction to Business	3	0	3
BUS 110	Office Machines I	2	2	3
BUS 131	Accounting I	2	3	3
		16	5	18
Third Quarter				
ENG 103	English III	3	0	3
BUS 117	Business Law III	3	0	3
PSY 110	Human Relations in Management	3	0	3
BUS 123	Business Finance or Elective	3	0	3
BUS 132	Accounting II	2	3	3
BUS 239	Marketing	3	0	3
		17	3	18
Fourth Quarter				
SPH 101	Fundamentals of Speech	3	0	3
BUS 133	Accounting III	2	3	3
EDP 104	Introduction to Data Processing	3	2	4
BUS 273	Elements of Retailing or Elective	3	0	3
	Social Science Elective	3	0	3
		14	5	16
Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 243	Advertising or Elective	3	0	3
BUS 235	Business Management	3	0	3
BUS 251	Cost Accounting	2	3	3
	Social Science Elective	3	0	3
		14	3	15
Sixth Quarter				
BUS 229	Taxes	2	3	4
BUS 272	Principles of Supervision	3	0	3
BUS 271	Office Management	3	0	3
BUS 275	Principles of Insurance	3	0	3
	Elective	3	0	3
		14	3	16

EXECUTIVE — SECRETARIAL

		Lec.	Lab.	Credit
First Quarter				
ENG 101	English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 105	Business Mathematics	5	0	5
BUS 115	Business Law I	3	0	3
		16	5	18
Second Quarter				
ENG 102	English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 107	Shorthand II	3	2	4
BUS 131	Accounting I	2	3	3
BUS 101	Introduction to Business	3	0	3
		13	8	16
Third Quarter				
ENG 103	English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 108	Shorthand III	3	2	4
BUS 132	Accounting II	2	3	3
EDP 104	Introduction to Data Processing	3	2	4
		13	10	17
Fourth Quarter				
SPH 101	Fundamentals of Speech I	3	0	3
BUS 206	Dictation and Transcription	3	2	4
BUS 205	Advanced Typewriting	2	3	3
BUS 110	Office Machines I	2	2	3
	Electives	6	0	6
		16	7	19
Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 207	Dictation and Transcription	3	2	4
BUS 214	Secretarial Procedures	3	2	4
BUS 111	Office Machines II	2	2	3
	Elective	3	0	3
		14	6	17
Sixth Quarter				
BUS 208	Dictation and Transcription	3	2	4
BUS 209	Production Typing	2	3	3
BUS 215	Office Application	3	12	6
	Social Science Elective	3	0	3
		11	17	16

MEDICAL SECRETARIAL

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 105	Business Mathematics	5	0	5
BUS 115	Business Law I	3	0	3
		16	5	18
Second Quarter				
ENG 102	English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 107	Shorthand II	3	2	4
BUS 131	Accounting I	2	3	3
BUS 101	Introduction to Business	3	0	3
		13	8	16
Third Quarter				
ENG 103	English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 108	Shorthand III	3	2	4
BUS 132	Accounting II	2	3	3
BUS 180M	Medical Terminology & Vocabulary	3	0	3
PED 205	Personal and Community Hygiene	3	0	3
		16	8	19
Fourth Quarter				
SPH 101	Fundamentals of Speech	3	0	3
BUS 206	Dictation & Transcription	3	2	4
BUS 280	Terminology & Vocabulary	3	0	3
BUS 205	Advanced Typewriting	2	3	3
BUS 110	Office Machines I	2	2	3
		13	7	16
Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 207	Dictation & Transcription	3	2	4
BUS 214	Secretarial Procedures	3	2	4
BUS 111	Office Machines II	2	2	3
	Elective	3	0	3
		14	6	17
Sixth Quarter				
BUS 208	Dictation & Transcription	3	2	4
BUS 209	Production Typewriting	2	3	3
BUS 215	Office Application	3	12	6
	Elective	3	0	3
		11	17	16

LEGAL SECRETARIAL

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 105	Business Mathematics	5	0	5
BUS 115	Business Law I	3	0	3
		16	5	18
Second Quarter				
ENG 102	English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 107	Shorthand II	3	2	4
BUS 131	Accounting I	2	3	3
BUS 116	Business Law II	3	0	3
		13	8	16
Third Quarter				
ENG 103	English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 108	Shorthand III	3	2	4
BUS 132	Accounting II	2	3	3
BUS 117	Business Law III	3	0	3
		13	8	16
Fourth Quarter				
SPH 101	Fundamentals of Speech I	3	0	3
BUS 206	Dictation and Transcription	3	2	4
BUS 205	Advanced Typewriting	2	3	3
BUS 110	Office Machines I	2	2	3
EDP 104	Introduction to Data Processing	3	2	4
	Elective	3	0	3
		16	9	20
Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 207	Dictation and Transcription	3	2	4
BUS 214	Secretarial Procedures	3	2	4
BUS 211	Office Machines—Stenoprint Mach.	2	2	3
	Elective	3	0	3
		14	6	17
Sixth Quarter				
BUS 208	Dictation and Transcription	3	2	4
BUS 209	Production Typing	2	3	3
BUS 215	Office Application	3	12	6
	Elective	3	0	3
		11	17	16

AGRICULTURAL BUSINESS TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
AGR 125	Animal Science	3	2	4
BUS 105	Business Mathematics	5	0	5
BUS 102	Typewriting I	2	3	3
BUS 115	Business Law 1	3	0	3
		16	5	18
Second Quarter				
ENG 102	English II	3	0	3
AGR 185	Soil Science	3	2	4
BUS 131	Accounting I	2	3	3
BUS 110	Office Machines I	2	2	3
BUS 101	Introduction to Business	3	0	3
BUS 116	Business Law II	3	0	3
		16	7	19
Third Quarter				
ENG 103	English III	3	0	3
AGR 104	Introduction to Agricultural Economics	3	0	3
BUS 132	Accounting II	2	3	3
AGR 170	Plant Science	3	2	4
BUS 123	Business Finance or Elective	3	0	3
		14	5	16
Fourth Quarter				
SPH 101	Fundamentals of Speech	3	0	3
AGR 204	Farm Business Management	3	0	3
AGR 271	Field Crops	3	0	3
AGR 222	*Agricultural Construction	3	2	4
EDP 104	*Introduction to Data Processing	3	2	4
BUS 273	*Elements of Retailing	3	0	3
		15	4	16

*Student may elect any combination of these totaling a minimum of 7 hours.

Fifth Quarter				
ENG 206	Business Communications	3	0	3
AGR 205	Agricultural Marketing	3	0	3
AGR 201	Agricultural Chemicals	3	2	4
AGR 218	Agricultural Mechanization	3	0	3
AGR 150	General Horticulture	3	2	4
		15	4	17
Sixth Quarter				
BUS 229	Taxes	3	2	4
AGR 228	Livestock Diseases and Parasites	3	2	4
AGR 272	Tobacco Technology	3	0	3
AGR 180	General Poultry Science	3	2	4
	Elective	3	0	3
		15	6	18

ELECTRONICS TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
MAT 110	Technical Mathematics I	5	0	5
PHY 101	Physics: Mechanics	3	2	4
DFT 101	Technical Drafting I	1	5	3
ELC 101	Fundamentals of Electricity I	4	5	6
		16	12	21
Second Quarter				
ENG 103	English II	3	0	3
MAT 111	Technical Mathematics II	5	0	5
PHY 102	Physics: Properties of Matter	3	2	4
ELC 102	Fundamentals of Electricity II	4	6	6
	Elective			3
		15	8	21
Third Quarter				
ENG 103	English III	3	0	3
MAT 112	Technical Mathematics III	5	0	5
ELC 103	Fundamentals of Electricity III	8	8	10
		16	8	18
Fourth Quarter				
SPH 201	Fundamentals of Speech I	3	0	3
MAT 201	Technical Mathematics IV	5	0	5
PHY 104	Physics: Light and Sound	3	2	4
ELN 201	Applications of Vacuum Tubes and Transistors	5	5	7
		16	7	19
Fifth Quarter				
DFT 104	Electronic Drafting	2	3	3
ELN 202	Vacuum Tubes and Semiconductor Devices	7	5	9
	Social Science Elective	3	0	3
		12	8	15
Sixth Quarter				
ELN 203	Industrial Electronics and Systems	7	6	10
	Social Science Elective	3	0	3
	Elective			3
		10	6	16

DRAFTING AND DESIGN TECHNOLOGY (MECHANICAL)

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
MAT 110	Technical Mathematics I	5	0	5
PHY 101	Physics: Mechanics	3	2	4
DFT 101	Technical Drafting I	1	5	3
MEC 101	Machine Processes I	1	5	3
		13	12	18
Second Quarter				
ENG 102	English II	3	0	0
MAT 111	Technical Mathematics II	5	0	5
PHY 102	Physics: Properties of Matter	3	2	4
DFT 102	Technical Drafting II	1	5	3
MEC 102	Machine Processes II	1	5	3
		13	12	18
Third Quarter				
ENG 103	English III	3	0	3
MAT 103	Technical Mathematics III	5	0	5
PHY 103	Physics: Electricity	3	2	4
PHY 106	Applied Mechanics	5	0	5
DFT 103	Technical Drafting III	1	5	3
		17	7	20
Fourth Quarter				
SPH 101	Fundamentals of Speech I	3	0	3
DFT 201	Technical Drafting IV	2	6	4
DFT 204	Descriptive Geometry	2	4	4
MEC 205	Strength of Materials	3	2	4
MEC 210	Physical Metallurgy	3	3	4
		13	15	19
Fifth Quarter				
	Social Science Elective	3	0	3
DFT 205	Design Drafting I	2	6	4
DFT 211	Mechanisms	3	2	4
MEC 211	Physical Metallurgy	3	3	4
	Elective	4	0	4
		15	11	19
Sixth Quarter				
	Social Science Elective	3	0	3
DFT 206	Design Drafting II	2	6	4
MEC 235	Hydraulics and Pneumatics	3	3	4
	Elective	3	0	3
DFT 212	Jig and Fixture Design	2	4	4
		13	13	18

MARTIN MEMORIAL NURSING PROGRAM

The program at Surry Community College combines a curriculum of nursing education and general education on the campus with selected learning experiences at hospitals, doctors' offices and other community health agencies under the direction of the College nursing faculty. The curriculum provides preparations for technical nursing. Graduates will be qualified to take the Registered Nurse examination in North Carolina. The curriculum prepares the graduates to give direct patient-centered nursing care under the supervision of a professional registered nurse as beginning level practitioners.

The curriculum for the nursing program is now in the developmental stage. Further information will be provided upon request.

VOCATIONAL DIVISION

(Diploma)

The objectives of the vocational programs at Surry Community College are to prepare individuals for initial employment in recognized skilled occupations, to re-train for entering new occupations, to advance in a given occupation by updating or upgrading skills and knowledge, to develop an understanding of the American free enterprise system, and to develop an interest in the betterment of our society.

Vocational programs require one full year of participation for students on a full-time basis. Courses will be available during the day and during the evening for students desiring to enroll on a part-time basis.

PROGRAMS OF STUDY

The diploma is granted upon the successful completion of one of the following one-year programs:

Power Mechanics—Automotive

Welding

Carpentry—Cooperative

Electrical Installation and Maintenance

Drafting

Machinist

Admission to a Program

These programs are open to any high school graduate or person 18 years of age or over who shows promise of successfully completing the program. Students with deficiencies in subjects basic to the program may be required to complete supplementary studies at the College prior to entering the program on a full-time basis.

AUTOMOTIVE MECHANICS

First Quarter		Lec.	Lab.	Credit
AUT 1111	Internal Combustion Engines	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
ENG 1101	Reading	2	0	2
PHY 1101	Applied Science I	3	2	4
		13	14	18

Second Quarter				
PMT 1112	Engine Electrical & Fuel Systems	5	12	9
ENG 1102	Communication Skills	3	0	3
DFT 1101	Schematics and Diagrams. Power Mechanics	0	3	1
PHY 1102	Applied Science II	3	2	4
		11	17	17

Third Quarter				
AUT 1123	Automotive Chassis and Suspension Systems	3	9	6
AUT 1121	Braking Systems	3	3	4
PSY 1101	Human Relations	3	0	3
AUT 1101	Automotive Air Conditioning	2	3	3
WLD 1101	Basic Gas Welding	0	3	1
		11	18	17

Fourth Quarter				
AUT 1124	Automotive Power Train Systems	3	9	6
AUT 1125	Automotive Servicing	3	9	6
BUS 1103	Small Business Operations	3	0	3
		9	18	15

WELDING

First Quarter		Lec.	Lab.	Credit
WLD 1120	Oxyacetylene Welding & Cutting	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
DFT 1104	Blueprint Reading: Mechanical	0	3	1
PHY 1101	Applied Science I	3	2	4
ENG 1101	Reading	2	0	2
		13	17	19
Second Quarter				
WLD 1121	Arc Welding	3	12	7
MAT 1103	Geometry	3	0	0
DFT 1117	Blueprint Reading: Welding	0	3	1
PHY 1102	Applied Science II	3	2	4
ENG 1102	Communication Skills	3	0	3
		12	17	18
Third Quarter				
WLD 1124	Pipe Welding	3	12	7
WLD 1123	Inert Gas Welding	1	3	2
WLD 1112	Mechanical Testing and Inspection	1	3	2
DFT 1119	Applied Mechanical Drawing I	1	5	3
PSY 1101	Human Relations	3	0	3
		9	23	17
Fourth Quarter				
WLD 1122	Commercial and Industrial Practices	3	9	6
WLD 1125	Certification Practices	3	6	5
MEC 1112	Machine Shop Processes	1	5	3
BUS 1105	Industrial Organizations	3	0	3
		10	20	17

COOPERATIVE CARPENTRY

This program prepares students for entry into the carpentry occupational field.

The students will alternate, one week in on-the-job training and one week in classroom and laboratory training.

The program consists of a minimum of 700 clock hours on the job and 600 clock hours of on-campus training.

A certificate is granted at the end of the 12-month program.

First Quarter		**Lec.**	**Lab.**	**Credit**
CAR 1101	Carpentry I	4	16	6
SAF 1101	Safety & First Aid	2	0	2
DFT 1110	Blueprint Reading	0	3	1
	On-the-job training	Approx. 200 hrs.		10
		6	19	19

Second Quarter				
CAR 1102	Carpentry II	4	16	6
ENG 1101	Reading	2	0	2
ENG 1102	Communication Skills	3	0	3
	On-the-job training	Approx. 200 hrs.		10
		9	16	21

Third Quarter				
CAR 1103	Carpentry III	4	16	6
MAT 1112	Applied Mathematics	3	0	3
PSY 1101	Human Relations	3	0	3
	On-the-job training	Approx. 100 hrs.		6
		10	16	18

Fourth Quarter				
CAR 1104	Carpentry IV	4	16	6
CAR 1110	Building Trades Survey	4	0	2
BUS 1103	Small Business Operation	3	0	3
	On-the-job training	Approx. 200 hrs.		10
		11	16	21

DRAFTING

First Quarter		Lec.	Lab.	Credit
DFT 1121	Drafting I	3	12	7
ENG 1101	Reading	2	0	2
MAT 1103	Geometry	3	0	3
PHY 1101	Applied Science I	3	2	4
MEC 101	Machine Processes I	1	5	3
		12	19	19
Second Quarter				
DFT 1122	Drafting II	3	6	5
DFT 204	Descriptive Geometry	2	4	4
MAT 1102	Algebra	3	0	3
PHY 1101	Applied Science II	3	2	4
MEC 102	Machine Processes II	1	5	3
		12	17	19
Third Quarter				
DFT 1131	Drafting III	3	6	5
MAT 1104	Trigonometry	3	0	3
PSY 1101	Human Relations	3	0	3
MEC 1115	Treatment of Ferrous Metals	2	3	3
DFT 106	Architectural Drawing I	2	4	4
		13	13	18
Fourth Quarter				
DFT 1132	Drafting IV	3	12	7
BUS 1105	Industrial Organization	3	0	3
MEC 1116	Treatment of Non-Ferrous Metals	3	3	3
DFT 107	Architectural Drawing II	2	4	4
		10	19	17

MACHINIST

First Quarter		Lec.	Lab.	Credit
MEC 1101	Machine Shop Theory and Practice	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
DFT 1104	Blueprint Reading — Mechanical	0	3	1
PHY 1101	Applied Science I	3	2	4
ENG 1101	Reading	2	0	2
		13	17	19
Second Quarter				
MEC 1102	Machine Shop Theory and Practice	3	12	7
MAT 1102	Geometry	3	0	3
DFT 1105	Blueprint Reading — Mechanical	0	3	1
PHY 1102	Applied Science II	3	2	4
ENG 1102	Communication Skills	3	0	3
WLD 1102	Basic Arc Welding	0	3	1
		12	20	19
Third Quarter				
MEC 1103	Machine Shop Theory and Practice	3	12	7
MEC 1115	Treatment of Ferrous Metals	2	3	3
PSY 1101	Human Relations	3	0	3
MAT 1104	Trigonometry	3	0	3
DFT 1119	Applied Mechanical Drawing I	1	5	3
		12	20	19
Fourth Quarter				
MEC 1104	Machine Shop Theory and Practice	3	12	7
MEC 1116	Treatment of Non-Ferrous Metals	2	3	3
WLD 1101	Basic Gas Welding	0	3	1
BUS 1105	Industrial Organization	3	0	3
DFT 1120	Applied Mechanical Drawing II	1	5	3
		9	23	17

ELECTRICAL INSTALLATION & MAINTENANCE

First Quarter		Lec.	Lab.	Credit
ELC 1112	Direct and Alternating Current	5	12	9
ENG 1101	Reading	2	0	2
MAT 1114	Electrical Math	5	0	5
PHY 1101	Applied Science I	3	2	4
		15	14	20

Second Quarter				
ELC 1113	Alternating Current and Direct Current Machines and Controls	5	12	9
DFT 1110	Blueprint Reading: Building Trades	0	3	1
ENG 1102	Communication Skills	3	0	3
PHY 1102	Applied Science II	3	2	4
		11	17	17

Third Quarter				
ELC 1124	Residential Wiring	5	9	8
ELN 1118	Industrial Electronics	3	6	5
PSY 1101	Human Relations	3	0	3
DFT 1113	Blueprint Reading: Electrical	0	3	1
		11	18	17

Fourth Quarter				
ELC 1125	Commercial and Industrial Wiring	5	12	9
ELN 1119	Industrial Electronics	3	6	5
BUS 1103	Small Business Operations	3	0	3
		11	18	17

ADULT AND CONTINUING EDUCATION

Surry Community College is committed to the continuing education of all the citizens in its area of service. To fulfill this commitment, the college offers a variety of courses, institutes, conferences, clinics, forums, demonstrations, workshops and exhibits designed to meet adult educational needs and interests.

Through the Adult and Continuing Education Center students find opportunities to retrain and update themselves in employment, to develop leadership and civic responsibility, to expand knowledge in general education, and to develop creativity in the fine arts.

The Adult Education courses are offered when there is community need and interest. Some courses and services, because of great demand, are offered on a regular, continuing basis. Other courses and services may be initiated by requests from individuals and groups. Surry Community College cooperates with schools, libraries, colleges, health and welfare groups, civic clubs, community clubs, law enforcement agencies, fire service groups. and business and industrial groups to provide educational service for greater numbers of people.

For further information write for Adult and Continuing Education Catalog.

COURSES OF INSTRUCTION

COURSE NUMBERING SYSTEM

Course designations consist of a three-or four-letter prefix and a number that indicate the curriculum and the level of the course. Freshman level courses are indicated by numbers ranging between 100-200; sophomore level courses 200-300. The 1100 numbering series designates courses in the vocational programs. On the same line, following the number, appear the course title, the number of lecture and laboratory hours per week, and the number of quarter hours earned by successfully completing the course.

AGRICULTURE

AGR 104—Introduction to Agricultural Economics 3 0 3

An introduction to economics, the functions of the economic system and agriculture's role in the economy. A review of the functions of the manager and an introduction to the principles he uses in making decisions to adjust to changing conditions. Analysis of the main sources of change which affect agricultural firms.

AGR 125—Animal Science 3 2 4

An introductory animal science course covering the fundamental principles of livestock production. A study of the animal body and the basic principles of reproduction, genetics, growth, fattening, digestion, along with the selection, feeding, improvement, processing, and marketing of livestock.

AGR 150—General Horticulture 3 2 4

A course dealing with horticulture principles and the application of plant science fundamentals to horticultural practices.
Prerequisite: AGR 170—Plant Science

AGR 170—Plant Science 3 2 4

An introductory general botany and crop science course covering the fundamental principles of the reproduction, growth, functions, and development of seed-bearing plants with application to certain commercially important plants in North Carolina.

AGR 180—General Poultry Science 3 2 4

An introduction to the science of poultry production. The major phases of the study include the history of the poultry industry; the anatomy and physiology of the chicken; the breeds and varieties; the breeding principles, the principles of incubation, brooding, rearing, feeding, housing, and management; marketing poultry products; and the science of disease and parasite prevention and control.

AGR 185—Soil Science and Fertilizers 3 2 4

A course dealing with basic principles of efficient classification, evaluation, and management of soils; care, cultivation, and fertilization of the soil, and conservation of soil fertility.

AGR 201—Agricultural Chemicals 3 2 4

A study of farm chemical pesticides, their ingredients, formulation, and farm application, with emphasis on the effective and safe use of chemicals in agricultural pest control.

AGR 204—Farm Business Management 3 0 3

A review of the functions of the manager of a business firm and the problems he faces. Development of the concept of planning by both partial and complete budgeting. Review of the concepts of costs and the lengths of run in production. Practice in preparing enterprise budgets as an aid in choosing what to produce. Use of partial budgeting to find the least cost production procedure. Analysis of production data to select the level of production that yields the most net revenue. Relationship between size, efficiency and income of a farm. Review of procedures for evaluating the efficiency of the manager.

Prerequisite: AGR 104.

AGR 205—Agricultural Marketing 3 0 3

An analysis of the functions of marketing in the economy and a survey of the problems marketing faces. A review of the market including foreign markets. Problems in the operations of marketing firms including buying and selling, processing, standardization and grading, risk taking and storage, financing, efficiency, and cooperation. Discussion of procedures of marketing such commodities as grain, cotton, livestock and tobacco.

AGR 218—Agricultural Mechanization 3 0 3

A study of farm machinery management and labor-saving devices. The economics of selection and operation of farm machinery. Study and evaluation of feed grinders and mixers, storage facilities, materials handling systems and other labor-saving devices.

AGR 222—Agricultural Construction 3 2 4

A study of practical planning of housing systems for humans, livestock, farm commodities, and equipment storage. The design will be related specifically to layout procedures, materials of construction, structural features, and cost estimating. There will be practical exercises in preparing sketches, blueprint reading, and job planning.

AGR 228—Livestock Diseases and Parasites 3 2 4

A course dealing with the common diseases and parasites of livestock; sanitation practices and procedures with emphasis on the cause, damage, symptoms, prevention and treatment of parasites and diseases, and management factors relating to disease and parasite prevention and control.

Prerequisite: AGR 125.

AGR 271—Field Crops 3 0 3

A study of crop species grown in southeastern United States and their place in the farm and economics programs. An application of the principles of crop production will be given for the major grain, oil, fiber, and special crops. The study will include the cultural practices, disease, and insect control, fertilization, weed control, grading and marketing of all field crops.

Prerequisite: AGR 170—Plant Science.

AGR 272—Tobacco Technology 3 0 3

All phases of tobacco production and marketing will be discussed. The latest research problems and findings dealing with this important cash crop will be discussed in relation to types of tobacco, the development and selection of varieties, plant production, diseases and insect control, soils, fertilization, cultural practices, harvesting, curing, grading, marketing, and manufacturing as it influences cultural practices.

ART

ART 101—Art History I 3 0 3

A general survey of art history against the background of Western culture. The periods of art from the antique through the Gothic will be studied in relation to their political, religious, and social setting.

ART 102—Art History II 3 0 3

An historical survey of the arts and artists of Europe from the Renaissance to twentieth century art and architecture.

ART 130—Introduction to Art 3 0 3

A beginner's course for those interested in learning to look at, appreciate, and enjoy the visual arts. The elements used to create a work of art are studied through discussion, reference to art works of the past and present, and actual experimentation in the various art media.

ART 131—Drawing I 3 0 3

The student is encouraged to discover an individual approach to the problems relating to expression and communication in graphic art. Areas of study include life drawing, stressing line, form and contour; landscape and city scape drawing, stressing the elements of proportion, composition and perspective. The student becomes familiar with several graphic media.

ART 132—Drawing II 3 0 3

A continuation of Art 131 emphasizing training in anatomy and life drawing. The relationship of medium to subject and historic and contemporary idioms will be analyzed.

Prerequisite: Art 131.

ART 133—Arts and Crafts 3 2 4

Provides for the acquisition of skills in the use of varied materials such as art metals, leather, plastics, papier-mache, and linoleum blocks. Designed for teacher education and religious education majors. Also valuable for hobby and leisure time activities. Laboratory periods.

ART 201—Painting I 3 0 3

A beginner's course in oil painting. Composition and color values are stressed. Subject matter: still-life and figure. The student is introduced to technical problems such as color mixing, use of palette, use of color wheel, and brush techniques. Composition and color theory are an integral part of this course.

ART 202—Painting II 3 0 3

A continuation of ART 201—Painting I. Use of full color palette, nonobjective composition, still life, and figure painting. Continual emphasis upon composition and color theory.

ART 203—Painting III 3 0 3

A continuation of ART 202—Painting II. Landscape painting, figure painting, still life, color, values, and composition are stressed.

ART 204—Painting: Water Color 3 0 3

Water color: transparent water color used for still life, flowers, and landscape compositions. Field trips offer opportunity to paint local mountain scenery.

AUTOMOTIVE

AUT 1101—Automotive Air conditioning 2 3 3

General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of operation, and control; proper handling of refrigerants in charging the system.

AUT 1111—Internal Combustion Engine 3 12 7

Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cam and camshafts, fuel and exhaust system, cooling systems, proper lubrication; and methods of testing, diagnosing and repairing.

AUT 1112—Engine Electrical and Fuel Systems 5 12 9

A thorough study of the electrical and fuel systems of the automobile. Battery cranking mechanism, generator, ignition, accessories and wiring, fuel pumps, carburetors, and fuel injectors. Characteristics of fuels, types of fuel systems, special tools, and testing equipment for the fuel and electrical system.

AUT 1121—Braking Systems 3 3 4

A complete study of various braking systems employed on automobiles and lightweight trucks. Emphasis is placed on how they operate, proper adjustment, and repair.

Prerequisite: PHY 1102.

AUT 1123—Automotive Chassis and Suspension Systems 3 9 6

Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of suspension and steering systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, and front end, and alignment.

AUT 1124—Automotive Power Train Systems 3 9 6

Principles and functions of the automotive power train systems; clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing and repair.

AUT 1125—Automotive servicing 3 9 6

Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Troubleshooting of automotive systems, providing a full range of experiences in testing, adjusting, repairing and replacing.

Prerequisites: AUT 1123, AUT 1121, AUT 1101.

BIOLOGY

BIO 101—General Biology 3 3 4

This course is designed to familiarize the student with the basic principles, problems, and similarities of living organisms. Emphasis is placed upon the chemical and morphological basis of life.

BIO 102—General Biology II 3 3 4

This course will acquaint the student with the perpetuation of life, development of the organism, and the formation of organism populations and communities.

Prerequisite: BIO 101.

BIO 103—General Biology III 3 3 4

An application of the principles acquired in Biology 101 and 102 will be utilized to give the student an appreciation of the origin and diversity of life in the plant and animal kingdoms.

Prerequisites: BIO 101, 102.

BIO 104, 105—Anatomy and Physiology 3 3 4

This is a basic course of the structure and function of the human body as related to nursing training. The body as an integrated whole, the moving body, body control, maintaining the metabolism of the body, reproduction, and control of body functions are the major topics of instruction. The laboratory sessions are correlated with the material in the lecture sessions to give the student practical experience in the basic phases of the course.

BIO 111—Nutrition I 3 0 3

A study of the essentials of an adequate diet. Topics considered are energy, protein, mineral and vitamin requirements, metabolism, deficiencies in the diet and their effects, and diet in relation to age and physical condition.

BIO 201—Local Flora 3 4 5

A field and laboratory study of local flora concerned with their classification, identification, and ecology by the use of keys and field studies.

Prerequisites: BIO 101, 102, 103.

BIO 202—Invertebrate Zoology 3 3 4

An advanced study of taxonomy, morphology, physiology, and the development of invertebrates stressing the major phyla.

Prerequisites: BIO 101, 102, 103.

BIO 203—Comparative Vertebrate Anatomy 3 4 5

An anatomical study of representative vertebrates including considerations of their morphology, physiology, ecology, and evolution.

Prerequisites: BIO 101, 102, 103.

BUSINESS

BUS 101—Introduction to Business 3 0 3

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management.

BUS 102—Typewriting I 2 3 3

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

BUS 103—Typewriting II 2 3 3

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript correspondence, and business forms.

Prerequisite: BUS 102 or the equivalent. Speed requirement, 30 words per minute for five minutes.

BUS 104—Typewriting III 2 3 3

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms.

Prerequisite: BUS 103 or the equivalent. Speed requirement, 40 words per minute for five minutes.

BUS 105—Business Mathematics 5 0 5

This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business.

BUS 106—Shorthand I 3 2 4

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.

BUS 107—Shorthand II 3 2 4

Continued study of theory with greater emphasis on dictation and elementary transcription.

Prerequisite: BUS 106 or the equivalent.

BUS 108—Shorthand III 3 2 4

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.

Prerequisite: BUS 107.

BUS 110—Office Machines I 2 2 3

A general survey of business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard machines, and calculators.

BUS 111—Office Machines II 2 2 3

Instruction in the operation of the bookkeeping-accounting machines, duplicating equipment, and the dictating and transcribing machines.

Prerequisite: BUS 110.

BUS 115—Business Law I 3 0 3

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.

BUS 116—Business Law II 3 0 3

Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership - corporation, mortgages, and property rights.

Prerequisite: BUS 115.

BUS 117—Business Law III 3 0 3

Continuation of business law stressing guaranty and suretyship, insurance, landlord and tenant liens, wills, trust and bankruptcy, and transportation.

Prerequisite: BUS 116.

BUS 123—Business Finance 3 0 3

Financing of business units, as individuals, partnerships, corporations and trusts. A detailed study is made of short-term, long-term, and consumer financing.

BUS 131—Principles of Accounting I 2 3 3

A study of the procedures of accounting and theory underlying those procedures. Introduction to double entry accounting.

BUS 132—Principles of Accounting II 2 3 3

A continuation of accounting theory developed in BUS 131 with concentration on single proprietorship and partnerships through the use of balance sheets, income statements and other accounting forms.

Prerequisite: BUS 131.

BUS 133—Principles of Accounting III 2 3 3

A study of accounting as applicable to corporations with a comparison between accounting records as they differ between privately owned and corporately owned enterprises.

Prerequisite: BUS 132.

BUS 131—Accounting 2 3 3

Principles, techniques and tools of accounting, for understanding, the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service mercantile enterprises, to include practical application of the principles learned.

Prerequisite: BUS 105.

BUS 132—Accounting 2 3 3

Partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting data for management control as well as on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.

BUS 180-M—Medical Terminology and Vocabulary 3 0 3

To develop an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business, technical, and professional offices.

BUS 205—Advanced Typewriting 2 3 3

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation, and the typing of reports, manuscripts and legal documents.

Speed requirement, 40 words per minute for 5 minutes to be admitted to the course.

BUS 206-E, 206-M, or 206-L—Dictation and Transcription 3 2 4

Develops the skill of taking dictation and of transcribing at the typewriter materials appropriate to the course of study, which includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 100 words per minute required for 5 minutes on new material.

BUS 207—Dictation and Transcription 3 2 4

Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 110 words per minute required for 5 minutes on new material.

BUS 208—Dictation and Transcription 3 2 4

Principally a speed building course, covering materials appropriate to the course of study, with emphasis as well on accuracy. Minimum dictation rate of 10 words per minute required for 5 minutes on new material.

Prerequisites: BUS 207.

BUS 209—Production Typing 2 3 3

Printed business forms are used to develop accuracy and speed. Designed as a pre-employment review of typing techniques.

BUS 211—Stenoprint 2 2 4

Students receive training in the techniques, operation, and application of a Stenoprint machine.

BUS 214—Secretarial Procedures 3 2 4

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims.

BUS 215—Office Application 3 12 6

During the sixth quarter only, students are assigned to work in a business, technical, or professional office for 12 hours a week. The objective is to provide actual work experience for secretarial students and an opportunity for the practical application of the skills and knowledge previously learned according to the course of study.

Prerequisites: BUS 214, BUS 205, BUS 207.

BUS 229—Taxes 3 2 4

Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise, and inheritance.

Prerequisite: BUS 131.

BUS 235—Business Management 3 0 3

Principles of business management including overview of major functions of management, such as planning, staffing, controlling, directing and financing. Clarification of the decision-making function. Role of management in business-qualifications and requirements.

BUS 239—Marketing 3 0 3

A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing processes.

BUS 243—Advertising 3 0 3

The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals; product and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media.

BUS 251, 252, 253—Cost Accounting I, II, III 2 3 3

This course is designed to develop the principles used in accounting to aid management in their planning, controlling, and analyzing of cost data. The areas studied include budgets, job and process costing, estimates and standard costing, direct costing, and break-even analysis.

Prerequisite: BUS 133.

BUS 271—Office Management 3 0 3

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems.

BUS 272—Principles of Supervision 3 0 3

Introduces the basic responsibilities and duties of the supervisor and his relationship to supervisors, subordinates, and associates. Emphasis on securing an effective work force and the role of the supervisor. Methods of supervision are stressed.

BUS 273—Elements of Retailing 3 0 3

This course is designed to help students understand retailing from the viewpoint of the owner or manager. Topics studied: organization of the retail firm, establishment of stores, customer needs, purchasing and financing, advertising and selling, planning and control.

BUS 274—Personnel Management 3 0 3

The techniques of supervising and coordinating the work of others. Among the items covered are employment interview techniques, training procedures, supervision of employees, delegating authority and responsibility factors influencing employees' morale, job studies and descriptions, current policies on labor-management relations and labor legislation affecting business workers.

BUS 275—Principles of Insurance 3 0 3

Types and provisions of life, property and casualty insurance from the point of view of an individual and business enterprise.

BUS 280-M—Medical Terminology and Vocabuulary 3 0 3

Greater emphasis on an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business.

Prerequisite: BUS 180-M.

BUS 1103—Small Business Operations 3 0 3

An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations.

BUS 1105—Industrial Organizations 3 0 3

Methods, techniques, and practices of modern management in planning, organizing and controlling operations of a manufacturing concern. Introduction to the competitive system and the factors constituting product cost.

CARPENTRY

CAR 1101—Carpentry I 4 16 6

An introduction to carpentry as a vocation; Basic knowledge and skills in hand and power tools, laboratory experience in layout for excavation and footings, introduction to wall, ceiling, and roof structures.

CAR 1102—Carpentry II 4 16 6

Continuation of Carpentry I including laboratory experience in form construction, floor sills, girders, posts, and joists; wall framing for doors and windows; roof rafters, dormers and porches. Principal woods and their uses, grades, and classification.

CAR 1103—Carpentry III 4 16 6

Continuation of Carpentry II including layout and construction of house section, scaffolding, sheathing, and roofing; insulation, trim and finishing of inside and outside sections. A study of using a variety of woods and materials is also included in this course.

CAR 1104—Carpentry IV 4 16 6

A continuation of Carpentry III. This course includes cabinet construction; stairway layout, construction, and finishing; building codes, permits, contracts, and essentials preparatory to building; architectural styles and specifications.

CAR 1110—Building Trades Survey 4 0 2

Course includes a general survey of other trades related to carpentry. Students will be introduced to bricklaying, building material, plumbing fundamentals, house wiring, and heating, refrigeration and air conditioning.

CAR 1114—Building Codes 3 0 3

A study is made of building codes and the minimum requirements for local, county and state construction regulations. This involves safety, sanitation, mechanical equipment and materials.

CHEMISTRY

CHM 101—General Chemistry I 3 4 4

A course providing instruction in language of chemistry; fundamental chemistry laws and theories, preparation and properties of elements and their compounds.

CHM 102—General Chemistry II 3 3 4

A continuation of 101 to include the following concepts: chemical change, kinetic-molecular theory and atomic structure compound formation. Emphasis is placed on the mastery of formula and equation writing and of chemical calculations.

CHM 103—General Chemistry III 3 3 4

A continuation of 102 with emphasis placed on gas laws, calculation of formulas, weight and volume relationships, equivalent weight, standard solutions, chemical equilibrium, redox and electro chemistry. Introduction to organic and nuclear chemistry.

CHM 111—Chemistry for Health Occupations 3 3 4

Basic principles of organic, inorganic, and bio-chemistry are studied as they are related to practice in health occuupations.

CHM 201—Qualitive Analysis 3 3 4

A course which extends the study of chemical principles to include equilibria of slightly soluble salts and of complex ions and systematic analysis. Laboratory consists of the qualitative analysis of both principles and techniques of separation and identification of inorganic cations and anions.

Prerequisite: CHM 103 or permission on instructor.

CHM 204, 205, 206—Organic Chemistry I, II, III 3 3 4

A year's course in the fundamentals of organic chemistry. The structure, physical properties, synthesis and typical reactions of the various series of aliphatic, alicyclic and aromatic compounds are studied with attention to reaction mechanisms. In the laboratory representative carbon compounds are synthesized with emphasis on basic laboratory techniques.

Prerequisites: CHM 101-102-103.

DATA PROCESSING

EDP 104—Introduction to Data Processing Systems 3 2 4

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detailed study of particular computer problems. This course is a prerequisite for all programming courses.

Prerequisite: BUS 131.

EDP 105—Survey of Data Processing 3 0 3

A survey of concepts and principles of data processing systems. Basically, this course is the same as EDP 104 with laboratory omitted and credit reduced. This course does not replace EDP 104 in a program where EDP is a required 4-credit hour course.

DRAFTING

DFT 101—Technical Drafting I 1 5 3

The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced.

DFT 102—Technical Drafting II 1 5 3

Application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, and sections and conventions will be studied. Most important is the introduction of the graphical analysis of space problems. Problems of practical design elements shall be studied. Dimensioning practices for "details" and "working drawing," approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects.

Prerequisite: DFT 101.

DFT 103—Technical Drafting III 1 5 3

Intersection and developments and their practical solutions. where applicable, model solutions accompany the problems. The various techniques employed to produce and render isometric and oblique drawings, isometric, dimetric and trimetric projections will be included.

Prerequisite: DFT 102.

DFT 104—Electronics Drafting 2 3 3

A continuation of skills and techniques in DFT 101 with special emphasis on electronic schematic diagrams and electronic circuit design.

DFT 106—Architectural Drafting I 2 4 4

An introduction to fundamental architectural drawing. Topics of study will include architect's scale, symbols, dimensioning, floor plans, sectional views and elevations of residential buildings.

DFT 107—Architectural Drafting II 2 4 4

A continuation of DFT 106. Further study of residential buildings with an introduction to industrial building. Projects completed in this two-course sequence will include producing the working drawings for a small residence and/or a small industrial plant.

DFT 201—Technical Drafting IV 2 6 4

Applications and constructions of charts, graphs, and nomographs n engineering and technical data. Screw threads, springs, keys, rivets, piping and welding symbols, methods of representing and specifying will be covered. Basic mechanisms of motion transfer, gears and cams, will be studied and drawn with emphasis on methods of specifying, calculating, dimensions, and delineating.

Prerequisite: DFT 103.

DFT 204—Descriptive Geometry 2 4 4

Graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems will be stressed with analytical verification where applicable. Visualization shall be stressed on every problem.

Prerequisites: DFT 102, MAT 102.

DFT 205—Design Drafting I 2 6 4

Basic design is introduced in the study of motion transfer mechanisms as they relate to power trains. Principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings and simplified drafting practices constitute areas of study. Types and methods of specifying materials and workmanship are an integral part of the course.

Prerequisites: DFT 204, MAT 102, PHY 102.

DFT 206—Design Drafting II 2 6 4

Research to solve a problem in design by consulting various manuals, periodicals, and through laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly and sub-assembly drawings, pictorial drawings, exploded pictorial assembly, patent drawings and specifications are required as a part of the problem.

Prerequisite: DFT 205.

DFT 211—Mechanisms 3 2 4

Mathematics and drafting room solutions of problems involving the principles of machine elements. Study of motion linkages, velocities and acceleration of points within a link mechanism; layout methods for designing cams, belts, pulleys, gears and gear trains.

Prerequisites: DFT 201 and 204, MAT 103, PHY 106.

DFT 212—Jig and Fixture Design 2 4 4

Commercial standards, principles, practices and tools of jig and fixture design. Individual project and design work to acquaint students with the types of jigs and fixtures and their design.

Prerequisites: DFT 205, DFT 211.

DFT 1101—Schematics and Diagrams: Power Mechanics 0 3 1

Interpretation and reading of blueprints. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.

DFT 1104—Blueprint Reading: Mechanical 0 3 1

Interpretation and reading of blueprints. Information on the basic principles of blueprint; lines, views, dimensioning procedures and notes.

DFT 1110—Blueprint Reading: Building Trades 0 3

Principles of interpreting blueprints and trade specification common to the building trades. Development of proficiency in making three view and pictorial sketches.

DFT 1112—Blueprint Reading and Sketching 0 3 1

Designed to develop abilities in reading complex drawings in the masonry field. Blueprints of residential and commercial buildings will be studied with emphasis on the plot plan, floor plan, basement and/or foundation plan, walls and various detailing drawings of masonry work.

DFT 1113—Blueprint Reading: Electrical 0 3 1

Interpretation of schematics, diagrams and blueprints applicable to electrical installations with emphasis on electrical plans for domestic and commercial buildings. Sketching schematics, diagrams, and electrical plans for electrical installations using appropriate symbols and notes according to the applicable codes will be a part of this course.

DFT 1115—Blueprint Reading: Plumbing Trades 0 3 1

Sketching diagrams and schematics, and interpretation of blueprints applicable to the plumbing trades. Emphasis will be on plumbing plans for domestic and commercial buildings. Piping symbols, schematics, diagrams and notes will be studied in detail. Applicable building and plumbing codes will be used for reference.

DFT 1116—Blueprint Reading: Air Conditioning 1 3 2

A specialized course in drafting for the heating, air conditioning and refrigeration student. Emphasis will be placed on reading of blueprints that are common to the trade; blueprints of mechanical components, assembly drawings, wiring diagrams and schematics, floor plans, heating system plans including duct and equipment layout plans, and shop sketches. The student will make tracings of floor plans and layout air conditioning systems.

DFT 1117—Blueprint Reading: Welding 0 3 1

A thorough study of trade drawing in which welding procedures are indicated. Interpretation, use and application of welding symbols, abbreviations, and specifications.

Prerequisite: DFT 1104.

DFT 1119—Applied Mechanical Drawing I 1 5 3

DFT 1119 and DFT 1120 constitute a series of courses in mechanical drawing designed primarily for students enrolled in various vocational programs involving the production and/or interpretation of basic working drawings.

DFT 1119 is basically an introduction to mechanical drawing with emphasis on the following topics of study: Drafting Equipment, Geometric Constructions, Sketching Techniques and Instrument Drawing of Orthographic, Sectional, Job Planning, and Pictorial views. Standard practices of dimensioning basic machine parts will culminate this course.

DFT 1120—Applied Mechanical Drawing II 1 5 3

Continuation of study and practice in mechanical drawing. Basic studies will include detail dimensioning, tolerancing, auxiliary views, working drawings and the reproduction of drawings.

Prerequisite: DFT 1119.

DFT 1121—Drafting 3 12 7

An introduction to drafting and the study of drafting practices. Instruction is given in the selection, use and care of instruments, singlestroke lettering, applied geometry, freehand sketching consisting of orthographic and pictorial drawings. Orthographic projection, reading and instrument drawing of principal views, single auxiliary views (primary), and double (oblique) auxiliary views will be emphasized. Dimensioning and note practices will be studied with reference to the American Standards Association practices. Methods of reproducing drawings will be included at the appropriate time.

Prerequisite: None.

DFT 1122—Drafting 3 6 5

Sections and conventions will be studied and both detail and assembly sections will be drawn. Intersections and developments will be studied by relating the drawing to the sheet metal trades.

Methods of drawing and projecting avonometric, oblique, and perspective drawings will be studied with emphasis on the practical applications of pictorial drawings. Various methods of shading will be introduced and dimensioning and sectioning of oblique and axonometric pictorials will be done.

Prerequisite: DFT 1121.

DFT 1131—Mechanical Drafting 3 6 5

An introduction to mechanical drafting beginning with problems concerning precision and limit dimensioning. Methods of fastening materials, and fasteners: keys, rivets, springs, and welding. Symbols will be studied and drawings will be made involving these items. Principles of design will be introduced with the study of basic mechanisms of motion transfer; gears, cams, power trains, pulleys, belting and methods of specifying and calculating dimensions will be studied. Drawings will be made involving these mechanisms.

Prerequisite: DFT 1122.

DFT 1132—Mechanical Drafting 3 12 7

Principles of design sketching, design drawings, layout drafting, detailing from layout drawings, production drawings and simplified drafting practices constitute areas of study. Forging and casting and casting drawings will be made from layouts. Specifications, parts list and bill of materials are emphasized in this course. The student will develop a complete set of working drawings of a tool, jig, fixture or simple machine and learn principles of design, handbook and manual usage.

Prerequisite: DFT 1131.

EDUCATION

EDU 201, 202—Introduction to Education 3 0 3

A course designed to acquaint the prospective teacher with four major aspects of education: the teaching profession. the school system, the teacher, and the pupil. Two quarters.

EDU 203—Teacher's Aide Seminar 3 0 3

This course is a seminar for Teacher Aides. The course will include audiovisuals, bulletin board preparation, professional attitudes, and general school procedures. Resource personnel from the local school system will assist.

EDU 204—Teacher's Aide Internship 0 18 6

This course includes practical experiences in school work. The student will be placed on the job during the sixth quarter for a minimum of 18 hours per week. The new course may be waived by a statement from a school official that the student has been successfully employed in a teacher's aide capacity for the required hours (approximately 200 hours.) **Teacher Aide program only.**

ECONOMICS

ECO 201-202-203—Principles of Economics 3 0 3

A study of the present-day economic system; demand, supply, prices, and cost; wages, rent, interest, and profit; business cycles, money, banking, and the Federal Reserve System; international trade; and a comparison of Capitalism, Socialism, Communism, and Fascism. (3 credits each quarter.)

ELECTRICITY

ELC 101—Electricity I 4 5 6

Elementary principles of electricity including: basic electric units, Ohm's law, Kirchoff's laws, network theorems, basic electrical measuring instruments, series circuits, parallel circuits, series-parallel circuits, direct current meters, and conductors and insulators. Elementary applications of devices are presented as well as laboratory experiments performed to illustrate the daily lessons.

ELC 102—Electricity II 4 6 6

Resistors, batteries, magetism, electromagnetic induction, Lenz's law, Faraday's law of inducted voltage, alternating voltage and current, inductance, inductive reactance, and inductive circuits. Electrical instruments and measuring techniques are studied in conjunction with laboratory experiments.

ELC 103—Electricity III 8 8 10

Capacitance, capacitive reactance, capacitive circuits, alternating-current circuits, complex numbers, resonance and filters. Laboratory experiments are performed to illustrate the daily lessons.

ELC 1102—Applied Electricity 2 3 3

The use and care of test instruments and equipment used in servicing electrical apparatus for air conditioning and refrigeration installation. Electrical principles and procedures for trouble-shooting of the various electrical devices used in air conditioning, heating, and refrigeration equipment. Included will be transformers, various types of motors and starting devices, switches, electrical heating devices and wiring.

Prerequisite: PHY 1101.

ELC 1112—Direct and Alternating Current 5 12 9

A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchoff's Law. A study of the sources of direct current voltage potentials. Fundamental concepts of alternating current flow, reactance, impedance, phase angle, power, and resonance. Analysis of alternating current circuits.

ELC 1113—Alternating Current and Direct Current Machines and Controls 5 12 9

Provides fundamental concepts in single and polyphase alternating cuurrent circuits, voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis. The basic concepts of AC and DC machines and simple system controls. An introduction to the tple control used in small appliances such as: thermostats, timers, or sequencing switches.

Prerequisites: ELC 1112, MAT 1115.

ELC 1124—Residential Wiring 5 9 8

Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications such as: services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, National Electrical Code regulations in actual building mockups.

Prerequisites: ELC 1113, DFT 1110.

ELC 1125—Commercial and Industrial Wiring 5 12 9

Layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation. and installation of simple systems.

Prerequisites: ELN 1118, ELC 1124.

ELECTRONICS

ELN 201—Vacuum Tubes and Transistors 5 5 7

A study in depth of the theory and electrical characteristics of vacuum tubes and sediconductors devices which includes: the diode, triode, multigrid and multiunit tubes, special purpose electron tubes, semiconductor diodes, convention transistors, special purpose transistor types and miscellaneous semiconductor devices. Laboratory experiments correlate with the lectures in such a manner to enable the student to learn the instruments and measurements required to become familiar with the above devices.

ELN 202—Applications of Vacuum Tubes and Semiconductor Devices 7 5 9

Practical application of vacuum tubes and semiconductors devices to basic electronic power supplies, amplifiers, audio amplifiers, radio frequency amplifiers, direct-coupled amplifiers, sinusoidal oscillators, relaxation oscillators, triggered oscillators, modulation and demodulation, waveforms and wave shaping circuits, switching, gating, and counting circuits. Analysis and design of transistor circuits in regard to performance and limitations pertinent to reliable operations are considered. Appropriate laboratory experiments enable the student to become competent in their applications.

ELN 203—Industrial Electronics Systems 7 6 10

This course covers in fair depth the theory and applications of transducers, security devices, analog and digital computers and lasers. Special student projects of repair and assembly of electronic equipment is encouraged. The laboratory accompanying this course provides the student with a means of becoming familiar with the equipment and its practical uses.

ELN 1118—Industrial Electronics 3 6 , 5

Basic theory, operating characteristics, and application of vacuum tubes such as: diodes, triodes, tetrodes, pentodes, and gaseous control tubes. An introduction to amplifiers using triodes, power supplies using diodes, and other basic applications.

Prerequisite: ELC 1113.

ELN 1119—Industrial Electronics 3 6 5

Basic industrial electronic systems such as: motor controls, alarm systems, heating systems and controls, magnetic amplifier controls, welding control systems using thyatron tubes, and other basic types of systems commonly found in most industries.

Prerequisite: ELN 1118.

ENGINEERING

EGR 105—Graphics for Engineers I 2 4 3

Instruction in the use of drafting instruments, freehand drawing, and lettering. Theory of projection, including orthographic multiviews, auxiliary views, and the various kinds of pictorial projections. Sectional views and conventional practices. dimensioning and notations. Representation and specification of threads and fasteners, gears and cams. Working drawings, including limits and tolerances. Concurrent enrollment in College Algebra or higher.

EGR 106—Graphics for Engineers II 2 4 3

Basic descriptive geometry; systematic solutions and analysis of the relationships of points, lines, and planes in space; developments and intersections. Applications of graphics to various fields of engineering. Vector geometry, graphic mathematics, and nomography. Concurrent enrollment in College Trigonometry or higher.

ENGLISH

ENG 090—Remedial English 3 0 0

A course for the improvement and development of writing techniques including emphasis on meaningful and logical sentence construction, paragraph building, outline preparation and themes.

ENG 100—Reading I 1 2 1

A course to aid students in improving vocabulary and comprehension skills. Phonics, structural analysis, dictionary usage, critical reading, literal comprehension, and fluency and speed are considered.

ENG 110—Reading II 1 2 2

Designed to help the student improve his vocabulary, comprehension, speed, and study skills. Emphasis is placed upon word parts, sentence and paragraph meaning, paragraph patterns, outlining for comprehension and critical reading. Diagnostic testing, reading films, and tachistoscope are incorporated.

ENG 101—Freshman English I 3 0 3

This Course is designed to help the student enrich his knowledge of English grammar, punctuation, sentence and paragraph building, and the use of the dictionary. These mechanics of English will be applied to short themes as required.

ENG 102—Freshman English II 3 0 3

This course is a continuation of College English I, with frequent themes required. Conferences with individual students are recommended. There will be an introduction to principal literary forms by means of selections from modern authors and periodicals.

Prerequisite: English 101.

ENG 103—Freshman English III 3 0 3

This course emphasizes the development of good prose style and gives practice in the use of source materials. Longer themes and research papers will be required.

ENG 201, 202, 203—Survey of English Literature I, II, III 3 0 3

A survey of English Literature from Beowulf to the Twentieth Century. Emphasis will be placed upon the most outstanding and influential writers of the period.

ENG 205—Report Writing 3 0 3

The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum.

Prerequisite: English 102

ENG 206—Business Communications 3 0 3

Develops skills in techniques in writing business communications. Emphasis is placed on writing action-getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgements, remittances, and inquiry.

Prerequisite: English 102.

ENG 210, 211, 212—Survey of American Literature I, II 3 0 3

A survey of American Literature from 1900 to the present. Emphasis will be on reading rather than literary history. Three quarters.

Prerequisite: English 101, 102, 103.

ENG 101—Reading Improvement 2 0 2

Designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition and train for comprehension in larger units.

ENG 1102—Communication Skills 3 0 3

Designed to promote effective communication through correct language usage in speaking and writing.

Prerequisite: ENG 1101.

FRENCH

FRE 101, 102, 103—Elementary French I, II, II 2 3 3

An introduction to French, with a modern audio-lingual approach. Up-to-date materials and methods. Emphasis first on hearing and speaking. then on reading and writing. Lab work is required as part of the course for those with no previous French or those who do not make a satisfactory score on the French placement test.

Prerequisite: Satisfactory score on college placement test.

FRE 151, 152, 153—Intermediate French I, II, III 2 3 3

A review of the skills of hearing, speaking, reading, and writing. Audio-lingual work in class and in lab. Selected supplementary readings.

Prerequisites: Two units of high school French and a satisfactory placement test score or FRE 101 and FRE 102.

FRE 201, 202, 203—Survey of French Civilization I, II, III 2 3 3

The first of a two-course sequence. A study of French culuture and civilization. Selected readings in French literature from the Middle Ages to the present. Parallel reading and reports.

Prerequisite: FRE 152.

GEOGRAPHY

GEO 201—Physical Geography 3 0 3

The earth's astronomical relations, factors of weather and climate, and physical features.

GEO 202—Economic Geography 3 0 3

Geographic factors involved in production, distribution, consumption, and conservation of the major crops, minerals, and industries of the world.

HISTORY

HIS 101, 102, 103—History of Western Civilization 3 0 0

The institution and culture of Western society from 5,000 B.C. to the present. Topics include the classical Greek and Roman worlds, the growth of Christianity, Medieval Europe, the Renaissance, the Reformation, the emergence of the modern national state, the rise of commercial capitalism, the Industrial Revolution, the French Revolution, liberalism, nationalism, the alliance system, imperialism, World War II and its aftermath, and the ideologies of the twentieth century. Three quarters.

HIS 104—Modern History 3 0 3

A foundation for the study of current international problems styled primarily for technical and vocational students. Emphasis is on Europe and America in the nineteenth and twentieth centuries but in a world context and against a general background of ancient, medieval, and early modern history.

HIS 201, 202, 203—American History 3 0 3

A survey of American History from the period of discovery and colonization to the present. The course is conducted through lectures, text books, collateral reading, and map studies.

HIS 204—Current World Problems 3 0 3

A detailed examination of current international problems, including nationalism in underdeveloped countries, racial minorities, water and air pollution, the population explosion and famine, the armaments race, and international organizations—but with emphasis on a particularly urgent problem of present world concern. In addition to text and periodical assignments and daily newspaper readings, each student will be expected to present a comprehensive oral or written report.

MATHEMATICS

MAT 80, 81, 82—Remedial Mathematics 3 0 0

A three-quarter, three-hour per week course consisting of an intensive study of pre-college algebra and geometry and of the arithmetical skills necessary in a study of college-level mathematics.

MAT 101, 102—College Mathematics I, II 3 0 3

A two-quarter course which, along with 103, will comprise the minimum college requirements for all AA degree candidates. These two quarters will consist of a study of sets, logic and axiomatic development of number systems (excluding complex numbers). Ideas of mathematical language and proof applied to elementary algebra. Some number theory including different bases, congruences, and modular systems. Brief treatment of probability and statistical methods. MAT 101 is a prerequisite for MAT 102. Three quarter hours each quarter.

MAT 103—College Mathematics III 3 0 3

A continuation in the spirit of 101-102 but including algebraic and graphical solutions of systems, linear equations and inequalities followed by elementary linear programming. Some finite and modern geometries and a non-analytical study of trigonometry. Attempts will be made to introduce the rudiments of plane analytic geometry at least through consideration of standard positions of the conic sections.

Prerequisite: MAT 101-102. Three quarter hours.

MAT 105, 106—College Algebra and Trigonometry 5 0 5

Designed to promote understanding of the logic structure of algebra and the development of algebraic techniques, along with a study of analytic trigonometry. Topics include: the theory of sets for integers, rational numbers, real numbers, complex fields, equations, inequalities, functions and relations. exponential and logarithmic functions, trigonometric functions, identities, equations, circular functions, inverse functions, triangle solution including sine and cosine laws, matrices, and series. (5 hours credit each quarter.)

MAT 107—Analytic Geometry and Calculus I 5 0, 5

A unified sequence in analytic geometry and differential and integral calculus. (This sequence is recommended for students in the sciences and engineering programs.) Prerequisite: Math 106 or the equivalent and consent.

MAT 110—Technical Mathematics I 5 0

The real number system is developed as an extension of natural numbers. Number systems of various bases are introduced. Fundamental algebraic operations. the rectangular coordinate system, as well as the fundamental trigonometric concepts and operations are introduced. The application of these principles to practical problems is stressed.

Prerequisite: Satisfactory evidence that admission requirements have been met.

MAT 111—Technical Mathematics II 5 0 5

The objective of this course is to develop an understanding of simultaneous equations, trigonometric functions, with applications and analysis, and the algebra of complex numbers. In addition, students continue to be given instruction in slide-rule operation with work in the accompanying handbook.

Prerequisite: MAT 110.

MAT 112—Technical Mathematics III 5 0 5

The objective of this course is to develop an understanding of analytic geometry and the calculus. Instruction in slide-rule operation continues.

Prerequisite: MAT 111.

MAT 201—Technical Mathematics IV 5 0 5

A continuation of MAT 112. More advanced concepts of differentiation and integration are considered. Included are graphs and derivatives of the trigonometric functions, exponential and logarithmic differentiation and integration, advanced integration techniques, polar equations, and parametric equations.

Prerequisite: MAT 112.

MAT 205—Analytic Geometry and Calculus II 5 0 5

A continuation of Math 107. Topics include definite integrals; application to areas, volumes, arc lengths and work; exponential and trigonometric functions; integration methods.

Prerequisite: MAT 107 or consent.

MAT 206—Analytic Geometry and Calculus III 5 0 5

A continuation of MAT 205. Included will be conics, moments, centers of gravity, indeterminate forms, improper integrals, series, two-dimensional vector algebra, and polar coordinates.

Prerequisite: MAT 205 or consent.

MAT 207—Analytic Geometry and Calculus IV 5 0 5

A continuation of MAT 206. Included are three-dimensional vector algebra, multiple integrals, line integrals, surface integrals, and change of variables.

Prerequisite: MAT 206 or consent.

MAT 208—Differential Equations 5 0 5

Special non-linear equations, linear equations, transformations, symbolic method; solutions in series; Gauss, Bessel and Legendre equations; simultaneous differential equations.

Prerequisite: MAT 205, 206, 207.

MAT 210—Introduction to Linear Algebra 5 0 5

A study of vectors, matrices, and determinants leading to a wide variety of problems in linear algebra that arise in mathematics and the natural sciences, engineering, business, and the social sciences.

MAT 1101—Fundamentals of Mathematics 5 0 5

Practical number theory. Analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.

MAT 1102—Algebra 3 0 3

Basic concepts and operations of algebra: historical background of our base-10 number system; algebraic operations: addition, subtraction, multiplication and division; fraction, letter representation. grouping, factoring, ratio and proportions, variation; graphical and algebraic solution of first degree equations; solution of simultaneous equations by: addition and subtraction, substitution, graphing, exponents, logarithms, tables and interpolation.

MAT 1103—Geometry 3 0 3

Fundamental properties and definitions; plane and solid geometric figures, selected general theorems, geometric construction of lines, angles and plane figures. Dihedral angles, areas of plane figures, volumes of solids. Geometric principles are applied to shop operations.

MAT 1104—Trigonometry 3 0 3

Trigonometric ratios; solving problems with right triangles, using tables and interpolating; solution to oblique triangles using law of sines and law of cosines; graphs of the trigonometric functions; inverse functions, trigonometric equations.

Prerequisite: MAT 1103.

MAT 1112—Building Trades Mathematics 3 0 3

Practical problems dealing with volumes, weights, ratios, mensuration, and basic estimating practices bor building materials.

MAT 1115—Electrical Mathematics 5 0 5

A study of fundamental concepts of algebra, basic operations of addition, subtraction, multiplication, and division; solution of first order equations, use of letters and signs, grouping, factoring, exponents, ratios, and proportions; solution of equations, algebraically and graphically; a study of logarithms and use of tables; an introduction to trigonometric functions and their application to right angles; and a study of vectors for use in alternating current.

MECHANICS

MEC 101—Machine Processes I 1 5 3

An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of measuring instruments, characteristics of metals and cutting tools. The student will become familiar with the lathe family of machine tools by performing selected operations such as turning, facing, threading, drilling, boring and reaming.

MEC 102—Machine Processes II 1 5 3

Advanced operations on lathe, drilling, boring and reaming machines. Milling machine theory and practice. Thorough study of the types of milling machines, cutters, jig and fixture devices, and the accessories used in a modern industrial plant. Safety in the operational shop is stressed.

Prerequisite: MEC 101.

MEC 205—Strength of Materials 3 2 4

Study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying and dynamic. Analyses of these stresses are made as applied to thin-walled cylinders and sphere, riveted and welded joints, beams, columns and machine components.

Prerequisites: PHY 106, MAT 111.

MEC 210—Physical Metallurgy I 3 3 4

Introductory course in metallurgy, a basic study of the properties of metals and alloys. Analysis of the structure of metals and alloys, atomic structure, nuclear structure, and nuclear reactions. Solid (Crystalline) structures, methods of designating crystal planes; liquid and vapor phases; phase diagrams; and alloy systems.

Prerequisite: PHY 101.

MEC 211—Physical Metallurgy II 3 3 4

Properties of metals and alloys, the reactions of metals, diffusion, carburizing, metal bonding and homogenization; recrystallization and grain growth, age hardening, nitriding, internal oxidation; heat treatment of steel; laboratory experiments and demonstrations.

Prerequisite: MEC 210.

MEC 235—Hydraulics and Pneumatics 3 3 4

The basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators and reservoirs.

Prerequisite: PHY 102.

MEC 1101—Machine Shop Theory and Practice 3 12 7

An introduction to the machinist trade and the potential it holds for a craftsman. Deals primarily with the identification, care, and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes of lathe, drill press, grinding (off-hand) and milling machines will be introduced both in theory and practice. Basic safety and job planning will be stressed in all machine shop courses.

MEC 1102—Machine Shop Theory and Practice 3 12 7

Advanced operations in layout tools and procedures, power sawing, drill press, surface grinder, milling machine shaper. The student will select projects encompassing all the operations, tools and procedures thus far used and those to be stressed throughout the course.

Prerequisite: MEC 1101.

MEC 1103—Machine Shop Theory and Practice 3 12 7

Advanced work on the engine, lathe, turning, boring, and threading machines, grinders, milling machines and shapers. Introduction to basic indexing and terminology. The trainee will use precision tools and measuring instruments such as vernier height gauges, protractors, comparators, etc.

Prerequisite: MEC 1102.

MEC 1104—Machine Shop Theory and Practice 3 12 7

Development of class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly and inspection. Additional processes on the lathe, surface grinder, advanced milling machine operations, etc. Special procedures and operations processes and equipment, observing safety procedures faith fully and establishing good work habits and attitudes acceptable to the industry.

Prerequisite: MEC 1103.

MEC 1112—Machine Shop Processes 1 5 3

To acquaint the student with the procedures of layout work and the correct use of hand and machine tools. Experience in the basic fundamentals of drill press and lathe operations; hand grinding of drill bits and lathe tools; set-up work applied to the trade. For welding students.

MEC 1120—Duct Construction and Maintenance 3 6 5

Study of various duct materials including sheet steel, aluminum, and fiber glass. Safety, sheet metal hand tools, cutting and shaping machines, fasteners and fabrication practices, layout methods, and development of duct systems. The student will service various duct systems and perform on the site repairs including ducts made of fiber glass. A study is made of duct fittings, dampers and regulators, diffusers, heater and air washers, fans, insulation, and ventilating hoods.

Prerequisites: DFT 1116, AHR 1123. Corequisite: AHR 1126.

MEC 1115—Treatment of Ferrous Metals 2 3 3

An introduction to the properties of ferrous metals and test to determine their uses. A background in the chemical aspects of metallurgy will be developed for a better understanding of the physical changes and causes of the changes in metals. The main topics of study will include iron and steel production, theory of alloys, shaping and forming, heat treatments for steels and alloys.

Prerequisite: PHY 1102.

MEC 1116—Treatment of Non-Ferrous Metals 2 3 3

Continuation of the study of physical metallurgy. Among nonferrous metals to be studies will be Bearing Metals (Brass, Bronze, Lead), Light Metals (Aluminum and Magnesium) and Copper and its alloys.

MUSIC

MUS 101—Introduction to Music 3 0 3

A non-technical course in music appreciation. Musical elements such as rhythm, harmony, tone, color, and form are analyzed and discussed. Musical masterworks are employed to develop an understanding of the role of music in contemporary culture.

MUS 102—History of Music 3 0 3

The growth of music from its beginning to the Modern Era. Representative works of various composers and periods are presented for analysis and discussion.

MUS 103, 104, 105—College Chorus 0 2 1

A study of vocal techniques and choral interpretation. Ensemble singing including the performance of works from standard choral repertory. Voice range audition is required of all students. Attendance at rehearsals and performance is expected. The course is open to all students. Meets two hours per week for one credit.

MUS 203, 204, 205—College Chorus 0 2 1

A continuation of MUS 103, 104, 105.

PHILOSOPHY

PHI 201, 202—Introduction to Philosophy I, II 3 0 3

A study of the fundamental problems of philosophy, emphasizing the importance of philosophical thinking for man's everyday experience: an examination of typical ideas and systems of ideas throughout history.

PHYSICAL EDUCATION

MEN				
PED 101	Soccer and Touch Football	0	2	1
PED 102	Stunts, Tumbling and Wrestling	0	2	1
PED 103	Softball and Golf	0	2	1
WOMEN				
PED 101	Soccer and Speedball	0	2	1
PED 102	Stunts, Tumbling and Bowling	0	2	1
PED 103	Softball, Archery and Badminton	0	2	1
MEN				
PED 201	Badminton and Volleyball	0	2	1
PED 202	Table Tennis, Shuffleboard and Bowling	0	2	1
PED 203	Basic Tennis and Archery	0	2	1
WOMEN				
PED 201	Golf and Volleyball	0	2	1
PED 202	Gymnastics, Table Tennis and Shuffleboard	0	2	1
PED 203	Tennis	0	2	1
MEN & WOMEN				
PED 104	Basic Swimming	0	2	1
PED 204	Advanced Tennis	0	2	1
PED 205	Personal Health and Community Hygiene	3	0	3

The study of personal and community health and hygiene as it relates to the individual student in society.

PHYSICAL SCIENCE

PHS 101—Physics Survey 2 2 3

The beginning course of physical science includes a study of physics. Some of the topics of discussion are measurement, forces, gravity, mechanics, heat, light, sound, electricity, and atomic properties.

PHS 102—Chemistry Survey 2 2 3

Included in this course are general discussions of the basic concepts of chemistry and the properties of elements. Topics of discussion include the following: chemical processes, water, ionization, nitrogen, the halogen, sulfur, carbon and silicon, and organic and food chemistry.

PHS 103—Meterology-Geology-Astronomy 2 2 3

Topics for consideration are atmosphere, weather, erosion, rocks, earth's past, the solar system, the Milky Way, and extragalactic systems.

PHYSICS

PHY 101—Mechanics 3 2 4

An introductory course in physics designed for the technically oriented student covering measurement both in English or metric system, vectors, linear motion, Newton's laws, energy, and rotational motion.

PHY 102—Properties of Matter and Heat 3 2 4

This course includes the study of gas, solids, and liquids under varied conditions. Heat and thermodynamic investigations are discussed. The course closes with an investigation into the history and basic properties of nuclear and atomic physics.

PHY 103—Electricity 3 2 4

Electrostatics, magnetism and current electricity are the subjects covered in this course. Topics such as meters, induction, transformers, Ohm's laws and Kirchoff's laws are discussed in detail.

PHY 104—Light and Sound 3 2 4

Light and sound are the two areas which constitute this course. Concepts of interference, Doppler effect, particle and wave theories of light, and spectra classification are some of the main topics discussed.

PHY 106—Applied Mechanics 5 0 5

Concepts and principles of statics and dynamics. Parallel Concurrent and noncurrent force systems in coplaner and noncoplaner situation. Concepts of centroids and center of gravity, moments of inertia, fundamentals of Kinetics, and kinematics of velocity and motion.

Prerequisites: MAT 103, PHY 102.

PHY 201—General Physics I 3 2 4

This course designed primarily for physics and engineering (and technology) majors includes in the first quarter of study the following: machines and vector analysis, particle and rigid body mechanics, statics, rotary motion, Newton's laws, and conservation laws.

PHY 202—General Physics II 3 2 4

Second quarter of general physics includes the study of heat, sound, light, wave motions, and optics.

Prerequisite: PHY 201.

PHY 203—General Physics III 3 2 4

Final quarter of general physics includes the study of electricity, magnetism, atomic and nuclear physics.

Prerequisite: PHY 202.

PHY 1101—Applied Science 3 2 4

An introduction to physical principles and their application in industry. Topics in this course include measurement; properties of solids, liquids, and gases; basic electrical principles.

PHY 1102—Applied Science 3 2 4

The second in a series of two courses of applied physical principles. Topics introduced in this course are heat and thermometry, and principles of force, motion, work, energy, and power.

Prerequisite: PHY 1101.

POLITICAL SCIENCE

POL 201—American National Government 3 0 3

A study of the formation and development of the national government, its organization, functions and powers.

POL 202—American State and Local Government 3 0 3

A study of the organization, functions, and powers of state and local government in the United States.

PSYCHOLOGY

PSY 101, 102—General Psychology I, II 3 0 3

An introductory survey of psychology. Topics include pre- and post-natal development, the structure and functions of the nervous systems and glands, sensory organs and processes, intelligence, aptitudes and abilities, perception, motivation, learning, emotion, personality, and adjustment.

PSY 110—Human Relations in Management 3 0 3

A behaviorial science approach to business. Management problems related to motivation, communication, organization, balance and change; recognition and analysis of problems in human interaction.

PSY 201, 202—Human Development I, II 3 0 3

Development of the normal child and adolescent, with consideration of the social, biological and cultural influences upon growth. Two quarters.

Prerequisite: PSY 101, 102.

PSY 1101—Human Relations 3 0 3

A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

RELIGION

REL 101—Introduction to Old Testament 3 0 3

A survey of the Old Testament designed to introduce the student to the history, literature and religion of the ancient Hebrews.

REL 102—Introduction to New Testament 3 0 3

An examination of the New Testament intended to introduce the student to the Jewish background, the historical setting, the purpose, and the major ideas of this literature. Special emphasis will be given to the significance of the ministry of Jesus and the Apostle Paul.

REL 205—Comparative Religion 3 0 3

A comparative study of the major religions of the world, both ancient and modern. An analysis of major religious concepts with attention given to the effects on contemporary history.

SAFETY

SAF 1101—Safety and First Aid (Vocational) 2 0 2

Principles and practices as applied to emergency first aid, study of safety procedures and techniques as related to vocational training with the teaching emphasis placed on accident prevention.

SOCIOLOGY

SOC 201—Introduction to Sociology 3 0 3

A study of the fundamental principles and concepts of sociology, with emphasis on contemporary American institutions in relation to technological change, ethnic groups, population trends and social control.

SOC 202—Marriage and the Family 3 0 3

A study of the family as a social institution—its origins and development, its forms and functions, its interrelation with other social institutions, and its role in contemporary civilization. In connection therewith, a study is made of sex development, differentiations, social relationships between the sexes, and factors contributing to or mitigating against successful, stable marriages.

SPANISH

SPA 101, 102, 103—Elementary Spanish I, II, III 2 3 3

An introduction to Spanish, with a modern, audio-lingual approach. Up-to-date materials and methods are used. Emphasis first on hearing and speaking, then on reading and writing. Lab work is required as part of the course for those with no previous Spanish or those who do not make satisfactory score on Spanish placement tests. Three quarters.

SPA 151, 152, 153—Intermediate Spanish I, II, III 2 3 3

A review of the skills of hearing, speaking, reading and writing. Audio-lingual work in class and in lab. Selected supplementary readings. Three quarters.

Prerequisites: Two units of high school Spanish and a satisfactory placement test score, or SPA 101, SPA 102, and 103.
SPA 201, 202, 203—Survey of Spanish

SPA 201, 202, 203—Spanish Civilization I, II, II 3 0 3

A study of Spanish culture and civilization. Selected readings in the literature of Spain and Spanish America from the Middle Ages to the present. Parallel reading and reports. Three quarters.

Prerequisite: Permission of instructor.

SPEECH

SPH 101—Speech 1 3 0 3

This course involves the study and application of the fundamentals of extemporaneous speaking. Consideration of the mechanics of speech is involved with emphasis on oral reading as a means of improving voice and articulation.

SPH 102—Speech II 3 0 3

A study or oral interpretation of literature including the ballad; lyric and narrative poetry; the article and short story; dramatic reading; and an introduction to the principles of argumentation and debate.

SPH 103—Speech III 3 0 3

A study of representative, modern, and contemporary, one-act plays. Wide reading in the genre will be required. Study will be reinforced by at least one play production.

WELDING

WLD 1101—Basic Gas Welding 0 3 1

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding, bronze welding, silver-soldering, and flame-cutting methods applicable to mechanical repair work.

WLD 1112—Mechanical Testing and Inspection 1 3 2

The standard methods for mechanical testing of welds. The student is introduced to the various types of tests and testing procedures and performs the details of the test which will give adequate information as to the quality of the weld. Types of tests to be covered are: bend, destructive, free-bend, guide-bend, nick-tear notched bend, tee-bend, nondestructive, V-notch, Charpy impact, etc.

Prerequisites: WLD 1120, WLD 1121.

WLD 1120—Oxyacetylene Welding and Cutting 3 12 7

Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, assembly of units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead position, brazing, hard and soft soldering. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. Students perform mechanical testing and inspection to determine quality of the welds.

WLD 1102—Basic Arc Welding 0 3 1

Introduction to basic arc welding. Demonstrations by the instructor and basic welding practice by students. Safety practices will be stressed throughout the course.

WLD 1121—Arc Welding 3 12 7

The operation of AC transformers and DC motor generator arc welding sets. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weaknesses in welding. Safety procedures are emphasized throughout the course in the use of tools and equipment.

WLD 1122—Commercial and Industrial Practices 3 9 6

Designed to build skills through practices in simulated industrial processes and techniques: sketching and laying out on paper the size and shape description, listing the procedure steps necessary to build the product, and then actually following these directions to build the product. Emphasis is placed on maintenance, repairing worn or broken parts by special welding applications, field welding and nondestructive test and inspection.

Prerequisites: WLD 1120, WLD 1121.

WLD 1123—Inert Gas Welding 1 3 2

Introduction and practical operations in the use of inert-gas-shield arc welding. A study will be made of the equipment, operation, safety and practice in the various positions. A thorough study of such topics as: principles of operation, shielding gases, filler rods, process variations and applications, manual and automatic welding.

Prerequisites: WLD 1120, WLD 1121.

WLD 1124—Pipe Welding 3 12 7

Designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code.

Prerequisite: WLD 1121.

WLD 1125—Certification Practices 3 6 5

This course involves practice in welding the various materials to meet certification standards. The student uses various tests including the guided bend and the tensile strength tests to check the quality of his work. Emphasis is placed on attaining skill in producing quality welds.

Prerequisites: WLD 1120, WLD 1121, WLD 1123, WLD 1124.

FACULTY

ATKINS, BROADUS D. ..... Automotive Mechanics
A.A.S. — Central Utah Vocational School

AYERS, CLAUDE V. ..... Counselor and Director of Financial Aid
B.S., M.A. — Appalachian State University

BRENDLE, KENT F. ABE Coordinator for Yadkin County
A.B. — High Point College

COLLINS, JOHN K. ..... Drafting: Chairman of Technical-Vocational Division
B.S. — Western Carolina University
M.Ed. — North Carolina State University

COX, ABBE ROSE Art
B.S., M.A. — Columbia University

FANNON, JACK M. ..... Assistant Director of Adult and Continuing Education
B.S. — Appalachian State University

FINK, JAMES R. ..... English
A.B. — Stetson University
B.S., Th.M. — Southeast Baptist Theological Seminary

FREED, R. ERIC ..... Drafting and Design
A.A.S. — Forsyth Technical Institute

FREEMAN, RAYMOND C. Director of Learning Resources
B.S. — University of North Carolina
M.A. — Appalachian State University

GORRIARAN, ADOLFO ..... Spanish
Bachelor in Letters — Instituto del Vedado
Doctor of Law — University of Havana, Cuba

HINSHAW, PAUL ..... Physical Education
B.S., M.A. — Appalachian State University

HOLCOMB, CONRAD C., JR. ..... Social Science
A.B. — University of North Carolina
M.A. — George Washington University

HOLLAR, THURMAN D. ..... English
B.S., M.A. — Appalachian State University

HUDSON, COY L. ..... Agriculture
B.S., M.Ed. — North Carolina State University

HUTCHENS, JAMES A. ..... History and Economics
A.B., M.A. — University of North Carolina

JOHNSON, H. CLYDE ..... Business Manager
A.B. — Elon College
M.A.T. — University of North Carolina

JONES. GEORGE W. ..... Carpentry

KREPICK, I. JOHN ..... President
B.S. — Bloomsburg State College — M.A. — New York University

LAMBE, ANNEAL L. ..... Learning Lab Coordinator
Th.B. — John Wesley College

LEAR, C. MERRITT ..... Electronics
B.S., M.S. — University of North Carolina

McCANN, J. GUY ..... Mathematics
B.S., M.A. — Appalachian State University

MAYE, JOSEPH B. ..... Social Science
B.A. — Lenoir Rhyne College — B.D. — Duke University
M.S. — Radford College

MOTSINGER, C. WAYNE ..... Counselor
A.B. — Guilford College

NICHOLS, TANIS M. ..... Secretarial Science
B.S. — Western Carolina University

PAGE, CAROLYN F. ..... Secretarial Science
B.S. — Winston-Salem State University

PATTEN, MARY K. ..... Director of Nursing
B.S. — Duke University
M.A. — Teachers College of Columbia University

REECE, WELDON ..... Learning Lab Coordinator
B.S. — Guilford College

REEVES, JAMES M. ..... Director of Adult and Continuing Education
B.S., M.A. — Appalachian State University

RICHARDSON, PAMELA Y. ..... English
B.S., M.S. — Radford College

SANDERS, WILLIAM R. ..... Social Science
B.A. — Millsaps College — M.A. — University of North Carolina

SELBY T. NORWOOD ..... English
B.A., M.A.T. — University of North Carolina

SELTZER, RICHARD C. ..... Biology
A.A.S. — Agriculture and Technical Institute at Alfred
B.S. — University of Georgia — M.S. — Ohio University

SHEPHERD, CARLYLE M. ..... Mathematics
B.S., M.A. — Appalachian State University

SPARGER, GOLDIE S. ..... Secretarial Science
B.S. — Steed College — M.A. — Appalachian State University

STOCKTON, GEORGE E. ..... Dean of Student Personnel
B.S. — Trenton State College — M.Ed. — Temple University

SURRATT, CARLOS P. — Associate Dean and Director of Evening Programs
A.B. — University of North Carolina
M.A. — Appalachian State University

TEMPLETON, JAMES H. — Academic Dean
B.S., M.A. — Appalachian State University

THOMAS, ROY M. — Welding
Certificates — Department of the Navy Service Schools

THOMPSON, RUTH — Registrar; Counselor
B.S., M.S. — University of North Carolina

VAN HORN, JOHN M. — English
B.S., M.A. — Appalachian State University

WADE, JUDY — Biology
B.S. — Wake Forest University — M.A.T. — University of N. C.

WALLACE, JAMES H. — Business Administration
B.S. — North Carolina State University — M.B.A. — Harvard U.

WENGER, RAYMOND — Chemistry
B.S., M.S. — Penn. State University — Ph.D. — Purdue University

WHITE, WILLIAM B. — Learning Lab Coordinator
B.S., M.S. — North Carolina State University

WILSON, ELIZABETH W. — Reference Librarian
B.A. — Agnes Scott College — M. Libr. — Emory University

OFFICE AND GENERAL STAFF

Betty F. Hemmings — Bookkeeper
Betty I. Chilton — Library Clerk
Pauline W. Eads — Library Clerk
Jean S. Badgett — Secretary
Janie O. Garris — Secretary
Madge G. Gunnell — Secretary
Susan S. Johnson — Secretary
Judy W. Reece — Secretary
Regina H. St. Clair — Secretary
Ilma M. Shinault — Secretary
Judy S. Stephens — Secretary
Barbara J. Wall — Secretary
Lossie S. Bryant — Bookstore Manager
Leona M. Cook — Snackbar Manager
Graham Lawrence — Superintendent of Buildings and Grounds

CORRESPONDENCE DIRECTORY

For further information, inquiries in specific areas should be addressed to the office indicated at Surry Community College, Dobson, N. C. 27017.

Administrative Matters and Public Relations	**President**
Business Matters	**Business Manager**
Admissions, Catalogs	**Dean of Student Personnel**
Records, Transcripts	**Registrar**
Academic Information	**Academic Dean**
Placement	**Dean of Student Personnel**
Financial Aid	**Director of Financial Aid**
Evening Classes	**Associate Dean and Director of Evening Programs**
High School Completion	**Director of Adult and Continuing Education**
Extension Classes	**Director of Adult and Continuing Education**

TELEPHONE

Area Code 919

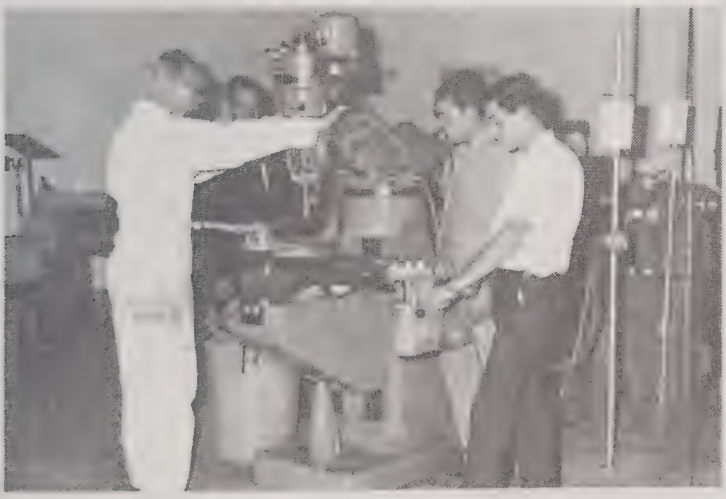
386-8121

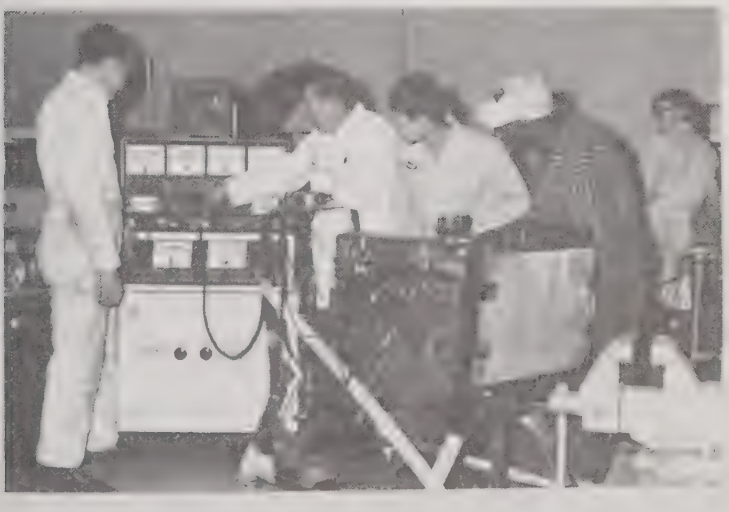
Dobson, N. C.

OFFICE HOURS

8:30 A. M. — 9:30 P. M., Monday through Thursday

8:30 A. M. — 5:00 P. M., Friday





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JULY

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4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

AUGUST

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

SEPTEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

OCTOBER

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Surry Community College

'72-'74

SURRY COMMUNITY COLLEGE

BOARD OF TRUSTEES

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William Allen, Jr.	Elkin, North Carolina
Mrs. Hugh G. Chatham	Elkin, North Carolina
Foy Clark	Mount Airy, North Carolina
Charles L. Folger	Dobson, North Carolina
Thomas L. Folger	Mount Airy, North Carolina
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Oscar Smith	Pilot Mountain, North Carolina
Howard O. Woltz, Jr.	Mount Airy, North Carolina
Robert Yarborough	Jonesville, North Carolina

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SWANSON RICHARDS	President
JAMES H. TEMPLETON	Dean of the College
GEORGE E. STOCKTON	Academic Dean
H. CLYDE JOHNSON	Dean of Administrative Services
CARLOS P. SURRATT	Dean of Evening Programs
RAYMOND C. FREEMAN	Director of Learning Resources
JAMES M. REEVES	Dean of Student Personnel
CLAUDE V. AYERS	Dean of Continuing Education
JOHN K. COLLINS	Director of Vocational-Technical Programs
RUTH THOMPSON	Registrar and Counselor
C. WAYNE MOTSINGER	Counselor and Director of Financial Aid
CARLYLE SHEPHERD	Counselor and Director of Student Activities
KENT BRENDLE	Coordinator for Yadkin County
MAX BLACKBURN	ABE Coordinator

SURRY COMMUNITY COLLEGE

CATALOG 1972-1974

Established by authority of the 1963
General Assembly under Chapter 115A.
General Statutes of North Carolina

ACCREDITED BY SOUTHERN ASSOCIATION
OF COLLEGES AND SCHOOLS

Box 304, Dobson, North Carolina 27017
Telephone 386-8121 (Area Code 919)

urry Community College Bulletin, Volume V, Number 1

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COLLEGE CALENDAR 1972-73

FALL QUARTER 1972-73

September 1 — Friday ..... Faculty Workshop
September 5 and 6 — Tuesday and Wednesday ..... Registration
September 7 — Thursday ..... Classes Begin
September 14 — Thursday ..... Last day to add classes
October 6 — Friday ..... Last day to drop without course appearing on record
November 22 — Wednesday ..... Last lay of quarter
November 23 and 24 — Thursday and Friday .... Thanksgiving Holidays

WINTER QUARTER 1972-73

November 27 — Monday ..... Registration
November 28 — Tuesday ..... Classes Begin
December 4 — Monday ..... Last day to add Classes
December 19 — Tuesday .... Last day to drop without course appearing on record
December 20 — Wednesday ..... First day of Christmas Holidays
January 3 — Wednesday ..... Classes Resume
March 2 — Friday ..... Last day of quarter

SPRING QUARTER 1972-73

March 5 — Monday ..... Registration
March 6 — Tuesday ..... Classes Begin
March 13 — Tuesday ..... Last day to add classes
March 30 — Friday ..... Last day to drop without course appearing on record
April 20 — Friday ..... First day of Easter Recess
April 25 — Wednesday ..... Classes Resume
May 23 — Wednesday ..... Last day of quarter

SUMMER QUARTER 1973

May 31 — Thursday ..... Registration
June 4 — Monday ..... Classes begin for first session and full quarter
July 4 — Wednesday ..... Holiday
July 10 — Tuesday ..... Last day of first session
July 12 — Thursday ..... Registration for second session
July 16 — Monday ..... Classes begin for second session
August 17 — Friday ..... Last day of second session and full quarter

COLLEGE CALENDAR 1973-74

FALL QUARTER 1973-74

September 4 — Tuesday	Faculty Workshop
September 5 and 6 — Wednesday and Thursday	Registration
September 7 — Friday	Classes Begin
September 14 — Friday	Last day to add classes
October 5 — Friday	Last day to drop without course appearing on record
November 21 — Wednesday	Last day of quarter

WINTER QUARTER 1973-74

November 26 — Monday	Registration
November 27 — Tuesday	Classes Begin
December 4 — Tuesday	Last day to add classes
December 19 — Wednesday	Last day to drop without course appearing on record
December 20 — Thursday	First day of Christmas Holiday
January 3 — Thursday	Classes Resume
February 28 — Thursday	Last day of quarter

SPRING QUARTER 1973-74

March 4 — Monday	Registration
March 5 — Tuesday	Classes Begin
March 12 — Tuesday	Last day to add classes
March 29 — Friday	Last day to drop without course appearing on record
April 12 — Friday	First day of Easter Vacation
April 17 — Wednesday	Classes Resume
May 24 — Friday	Last day of quarter

SUMMER QUARTER 1974

June 3 — Monday	Registration
June 4 — Tuesday	First session and full quarter classes begin
July 4 — Thursday	Holiday
July 11 — Thursday	Last day of first session
July 12 — Friday	Registration for second session
July 15 — Monday	Classes begin for second session
August 16 — Friday	Last day of second session and full quarter

STATEMENT OF PURPOSE

Surry Community College exists in the belief that each person should have the opportunity to reach his full potential within society. The college strives to provide, through quality instruction, guidance, counseling, and testing services, the skills and knowledge necessary for the development of the total individual.

Surry Community, College. a two-year comprehensive institution, established under the provision of Chapter 115A of the General Statutes, assumes its responsibility to:

— provide, through the open-door admissions policy, expanded and relatively inexpensive educational opportunities for young people and adults who would not otherwise continue their education.

— provide students who plan to transfer to other institutions with two years of quality college credit courses.

— provide technical programs appropriate to the needs of the individual in industry, agriculture, business, and service occupations.

— provide programs, such as automotive, electronics, building, machinist, drafting, and welding, for the development of skills and trades relevant to an individual's vocational needs.

— provide continuing programs for adults who desire to improve their personal efficiency, to enrich their cultural lives, or to develop basic educational skills.

— provide developmental work to minimize educational deficiencies.

— provide extracurricular activities to foster responsible citizenship and cultural enrichment.

HISTORY

Long before the publications of the Carlyle Report citizens of Surry County became interested in establishing a community college in the area. In 1962 the Mount Airy Lions Club appointed a committee of five members to study the possibilities and to communicate with the Division of Higher Education in Raleigh. In 1962, the committee was expanded to include all major civic groups in the county.

Local newspapers and radio stations endorsed the project and

expressed wholehearted approval. By May, 1963, interest in a community college had reached a point that a county-wide meeting was held in Dobson to discuss procedural steps. Following the meeting, the Surry County Board of Commissioners and the Boards of Education of the Elkin City Schools, the Mount Airy City Schools, and the Surry County Schools endorsed the community college project. Steps were taken to initiate a county-wide study.

The Surry County Board of Commissioners appointed a Community College Steering Committee on August 5, 1963, composed of fourteen members. This committee voted unanimously to complete the county survey and to submit an application to the State Board of Education at its December meeting for a comprehensive community college for Surry County. The application was submitted and approved by the State Board on January 9, 1964. On November 2, 1964, I. John Krepick was elected President of the Surry Community College. James H. Templeton served as interim president August 1971 - July 1972. Dr. Swanson Richards assumed the presidency July 1, 1972.

FACILITIES

The College facilities, located in Dobson, North Carolina, include four major structures—a science-technical building, shop building, learning resources building, and physical education-classroom building.

ACCREDITATION

Surry Commsnity College is accredited by the Southern Association of Colleges and Schools and by the North Carolina State Board of Education.

The College is a member of the American Association of Junior Colleges, the North Carolina Association of Junior Colleges and Universities and the Southern Association of Junior Colleges.

ADMISSIONS POLICY

Surry Community College is an "open-door" college and is not bound by restrictive admissions policies insofar as admission tests are concerned. It is the feeling of the college staff that secondary school records more accurately predict college success than any other criteria. However since college transfer students will, in some cases, need the Scholastic Aptitude Test for transfer, it is recommended that prospective college parallel students take this test while in high school.

The College will administer various tests which assist in the placement of students in the most suitable program. A personal interview with an admissions officer will aid the student to determine his specific educational opjectives. Where scores on tests indicate a lack of readiness to commence college-level work, the student will be assigned to a developmental studies program or to a learning laboratory. Most curricula require high school graduation or equivalent.

APPLLICATION PROCEDURES

1. Complete an application and return to Admissions Office. Students are urged to submit applications well in advance of the quarter

which is selected for enrollment. No fee should be sent with the application.

2. Upon receipt of the application the prospective student will receive detailed instructions regarding admission procedures.

3. Beginning students should request their high school to forward a transcript of their work to the Admissions Office.

4. Students transferring from another college will be accepted at the discretion of the Admissions Office. Transfer students should request official transcripts of all work attempted elsewhere. Such transcripts must be sent directly to Surry Community College.

TRANSFER CREDIT

Students transferring from other colleges must furnish official transcripts of records from all institutions attended. "D's" will be accepted if a student has a two point or "C" average on all work transferred into Surry Community College. Courses satisfactorily completed in other accredited institutions are evaluated in terms of the program selected at Surry Community College. Effective: September 1, 1971.

COUNSELING SERVICE

The prospective student will be given the opportunity to discuss his program with a professional counselor. Most full-time students will be required to arrange such an interview after transcripts have been received and analyzed.

STUDENT CONDUCT

Students should consider at all times that the reputation of the institution depends in no small part upon their behavior. No long list of regulations and penalties should be necessary if each student abides by the rules of common courtesy and cooperation. Specific regulations and official policies are listed in the student handbook. The college will dismiss any student who in its judgment conducts himself in a manner incompatible with the purposes of the college.

GUIDANCE

Guidance of the student begins with the admissions interview Immediately after registration, students meet with the faculty in their major course of study for an orientation to the entire curriculum Each student is assigned to a faculty adviser who helps him select his courses in subsequent quarters. Students are invited to discuss their personal and classroom problems, as well as their educational and vocational plans with any member of the college staff, as well as with the office of Student Personnel. The Student Personnel office helps students in all matters pertaining to transfer.

Students who need specialized, individual counseling service beyond that provided by faculty advisers may be referred to the Student Personnel office.

CO-CURRICULAR ACTIVITIES

The College recognizes that a well-balanced education program provides some time for social, cultural, and recreational activities. The office of the Dean of Student Personnel coordinates this aspect of college life. The Student Government Association is composed of all students.

Members to Student Government Council are elected from various curriculums. The purpose of the Student Government Association shall be to provide means for responsible student participation in the entire program of student affairs.

SCHOLARSHIPS

Surry Community College Foundation, Inc., was formed in 1966 under the guidance of the college trustees. Through the efforts of the directors of this non-profit organization contributors are solicited to aid students financially. Financial aid is made possible by business firms and individuals who have contributed funds to the College Foundation.

EDUCATIONAL OPPORTUNITY GRANTS PROGRAM

A limited number of Educational Opportunity Grants will be available to students who qualify under Title IV, Part A, of the Higher Education Act of 1965 (Public Law 89-329). The grants are made on the basis of need and ability. Applications should be completed and mailed to the college before July 15 of the year that Financial Aid Assistance is needed. Recipients of these awards will be notified before fall registration.

WORK-STUDY PROGRAMS

Part-time jobs are available on campus for students wishing to earn a part of their expenses. Jobs are assigned by the Student Personnel office to those students who are most urgently in need of help. In the assignment of part-time jobs, consideration is given to such factors as scholarship, financial need, and willingness to work.

JOB PLACEMENT

The college maintains a placement service in the counseling department for students who wish to secure part-time or full-time employment while attending college, during vacations or after graduation. Occupational information on job requirements and opportunities is provided in the counseling office.

OFFICIAL TRANSCRIPTS

Upon request of the student, an official transcript of his record at Surry Community College will be sent to any college or university, or to the student.

Each student is entitled to one official transcript of his work at no cost, provided all accounts with the College have been settled satisfactorily. A fee of $1.00 is charged for each additional transcript.

RESIDENCE

The tuition for legal residents of North Carolina is less than that of non-residents. The following should be helpful in determining residency.

—A legal resident must have maintained his domicile in North Carolina for at least 12 months prior to his initial enrollment.

—The legal residence of a person under 18 years of age is the same as that of his parents or legal guardian.

If questions arise concerning legal residency, contact the Business Office.

COLLEGE FEE SCHEDULE

Full-time	In-State Per Quarter	Out-of-State Per Quarter
College Parallel	$42.00	$137.50
Technical and Vocational	32.00	137.50
Student Activity Fees	6.00	6.00

Part-time	In-State Per Quarter Hour	Out-of-State Per Quarter Hour
College Parallel	$ 3.00	$ 11.45
Technical and Vocational	2.50	11.45
Student Activity Fee	3.00	3.00

Other Fees	
Late Registration (full-time)	$ 5.00
Late Registration (part-time)	2.00
Graduation Fee	10.00
Student Insurance (optional)	3.50

REFUND POLICY

Students who must withdraw from a class or a program must arrange to talk with the Dean of Student Personnel. Tuition refunds for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds (⅔) of the student's tuition may be refunded if the student withdraws within ten (10) calendar days after the first day of classes as published in the school calendar. Tuition refunds will not be considered for tuitions of five dollars ($5.00) or less. If a course or curriculum fails to materialize, all the tuition shall be refunded.

RE-ADMISSION REFUND

Where a student, having paid the required tuition and fees for a quarter withdraws from the institution before the end of the quarter and the reasons for the withdrawal are found excusable by the institution's administration, the student may be allowed credit for tuition and fees on a pro rata basis if he applies for re-admission during any of the next four calendar quarters and petitions in writing to be allowed such credit.

VETERANS

Students enrolling at the Community College who wish to use educational benefits under one of the Government bills for veterans should make application to the local Veterans Administration Office. Correspondence obtained or certificates granted should be discussed with the Dean of Student Personnel prior to registration for classes.

WITHDRAWAL

A student who withdraws is required to confer with his adviser and clear through the Registrar and the Business Office. Failure to do so will result in a forfeit of refunds or tuition credit.

AUDITING COURSES

The auditing of courses is permitted by special arrangement of the Academic Dean and of the instructor involved. Regularly enrolled students may audit courses. Tuition and fees are the same as required credit courses. Auditors receive no credit.

ACADEMIC INFORMATION

A student must maintain a Cumulative Quality Point Average of 2.0 or better to be in good academic standing.

Student progress is measured by Quality Point Average, or Q.P.A.; the quality of work a student has done at the College through one or more quarters is reflected by his Cumulative Point Average, or C.P.A.

The Quality Point Average is calculated as follows:

1. Allowing 4 points for an A, 3 points for a B, 2 points for a C, 1 point for a D, and 0 points for an F, multiply the number of points equivalent to the letter grade received in each course by the number of credit hours for the course to arrive at the quality points earned in each course.
2. Divide the sum of the quality points by the total number of credit hours of work; the quotient represents the Quality Points Average for the quarter.

The Cumulative Point Average is determined in the same manner s the Quality Point Average, except that all of the student's work at he College is taken into account.

YSTEM OF GRADING

The following grading system is used at Surry Community Col- ge:

etter	Description	Quality Points
A	Superior	4
B	Good	3
C	Average	2
D	Passing	1
F	Failing	0
I	Incomplete	0
WP	Withdrawn, passing	0
WF	Withdrawn, failing	0

GRADUATION REQUIREMENTS

Surry Community College grants the Associate in Arts Degree for students who complete a College Transfer Program, the Associate in Applied Science Degree for students who complete a two-year Technical program, and a vocational diploma for one-year vocational students. Degree candidates must complete the General Education requirements, applicable to their respective programs in addition to other courses for a minimum of 96 quarter hours, 30 of which must be taken at Surry Community College. Vocational candidates must complete the outlined courses in their respective curriculum. The student's overall grade point average must be at least 2.0 ("C") on work attempted at Surry Community College.

COMMENCEMENT

Candidates for degrees or diplomas are expected to attend commencement exercises. It is the responsibility of each student to apply to the Student Personnel Office for his degree or certificate at the beginning of the last quarter prior to his program completion. The $10 graduation fee should be paid at this time.

LEARNING LABORATORY

The Learning Laboratory is an important adjunct to the total college instructional program. The program is designed to provide study opportunities in practically any field in which an adult or college student might be interested. In the Lab are numerous programmed instruction courses in English, Reading, Mathematics, Science, Business, Social Studies, Foreign Language, and other disciplines. Programs are designed to meet the needs of individuals at all levels from non-readers to the college graduate. Students may pursue an area of personal interest, or study for the General Education Development Tests. Others may study to remedy an academic weakness, before or after entering college. or to supplement a course

EVENING CLASSES

The College operates an Evening Division for students and adults interested in pursuing a part-time program. College parallel, technical, and vocational courses are available. Classes usually meet one night a week from 7:00 to 10:00 p.m. Evening Division bulletins are available in the College office. Interested students should contact the Dean of Evening Programs or admissions office.

THE COLLEGE TRANSFER—LIBERAL ARTS PROGRAM

Associate in Arts Degree

The college transfer program is designed to parallel the freshman and sophomore years of study of a four year college or university.

In the first two years of college students pursue a program of general education in the areas of humanities, social studies, science and mathematics. Surry Community College provides counseling to help students plan their program for transfer to the college of their choice.

REQUIREMENTS FOR AN ASSOCIATE IN ARTS DEGREE

English 101, 102, 103	9 hours
History	9 hours
Science—(Biology, Physical Science, Chemistry, or Physics)	9-12 hours
Mathematics 101, 102, 103, or 105-106	9-10 hours
Physical Education 101, 102, 103	3 hours

Plus enough electives to complete 96 quarter hours.

SAMPLE LIBERAL ARTS PROGRAM

First Quarter

ENG 101	3
HIS 101	3
SCIENCE—(Bio 101, Chm 101, Phy Sci 101, or Phy 201)	3 or 4
MAT 101 or MAT 105	3 or 5
Elective	3
PED 101	1
	16 or 19

Second Quarter

ENG 102	3
HIS 102	3
SCIENCE—(Bio 102, Chm 102, Phy Sci 102, or Phy 202)	3 or 4
MAT 102 or 106	3 or 5
Elective	3
PED 102	1
	16 or 19

Third Quarter

ENG 103	3
HIS 103	3
SCIENCE—(Bio 103, Chm 103, Phy Sci 103, or Phy 203)	3 or 4
MAT 103 or 107	3 or 5
PED 103	1
Elective	3
Total	**16 or 19**
	48 or 57

ELECTIVES TO TOTAL 96 QUARTER HOURS.

The first two years of college preparation for many occupation and professions may be taken at Surry Commnnity College. Some o these fields are

Accounting
Banking and Finance
Business Administration
Business Education
Child Care Occupations
Counseling
Dentistry
Education
Engineering (Mechanical, Electrical, Textile, Civil, Chemical)
Forestry and Conservation Occupations
Insurance
Journalism
Law
Library Science
Mathematics
Medicine
Ministry
Nursing (and other allied health fields)
Psychology
Real Estate
Sales
Social Services
Veterinary Medicine

Each student will structure his own program in conference with h counselor or advisor. The structure of each student's program shoul be based on high school record, aptitude, vocational goal, and choi of college to which he plans to transfer.

COLLEGE TECHNICAL DIVISION

(Associate In Applied Science Degree)

The programs in the technology areas are designed to prepare students with technical competence for immediate employment in either business, industry, government, the health occupations fields, or as owner-manager of their firms. General education subjects are included as necessary adjuncts to these occupational programs.

Programs of Study

Business Options:

- General Business Management
- Executive Secretarial
- Medical Secretarial
- Legal Secretarial
- Agricultural Business
- General Office

Technology Options:

- Electronics Technology
- Drafting and Design Technology
- Martin Memorial Nursing Program

GENERAL BUSINESS MANAGEMENT PROGRAM

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
BUS 105	Business Math	5	0	5
ECO 201	Economics I	3	0	3
	ELECTIVES			6
				17

Second Quarter				
ENG 102	English II	3	0	3
ECO 202	Economics II	3	0	3
BUS 131	Accounting I	2	3	3
	ELECTIVES			9
				15

Third Quarter				
ENG 103	English III	3	0	3
BUS 132	Accounting II	2	3	3
	ELECTIVES			9
			1	15

Fourth Quarter				
BUS 133	Accounting III	2	3	3
BUS 110	Office Machines I	2	2	3
SPH 101	Fundamentals of Speech	3	0	3
	ELECTIVES			6
				15

Fifth Quarter				
BUS 251	Cost Accounting I	2	3	3
ENG 206	Business Communications	3	0	3
	ELECTIVES			12
				18

Sixth Quarter		
	ELECTIVES	15
		15

EXECUTIVE SECRETARIAL PROGRAM

irst Quarter		Lec.	Lab.	Credit
NG 101	English I	3	0	3
US 102	Typewriting I	2	3	3
US 106	Shorthand I	3	2	4
US 105	Business Math	5	0	5
				15
econd Quarter				
NG 102	English II	3	0	3
US 103	Typewriting II	2	3	3
US 107	Shorthand II	3	2	4
US 131	Accounting I	2	3	3
	ELECTIVE			3
				16
hird Quarter				
NG 103	English III	3	0	3
US 104	Typewriting III	2	3	3
US 108	Shorthand III	3	2	4
	ELECTIVES			6
				16
ourth Quarter				
PH 101	Fundamentals of Speech	3	0	3
JS 206E	Dictation & Transcription	3	2	4
JS 205	Advanced Typing	2	3	3
JS 110	Office Machines I	2	2	3
	ELECTIVE			3
				16
Fth Quarter				
EG 206	Business Communications	3	0	3
ES 207E	Dictation & Transcription	3	2	4
ES 214	Secretarial Procedures	3	2	4
ES 210	Filing	3	0	3
	ELECTIVE			3
				17
Sth Quarter				
BS 208E	Dictation & Transcription	3	2	4
BS 209	Production Typing	2	3	3
BS 215	Office Application	3	12	6
	ELECTIVE			3
				16

MEDICAL SECRETARIAL PROGRAM

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 105	Business Math	5	0	5
				15

Second Quarter				
ENG 102	English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 107	Shorthand II	3	2	4
BUS 180M	Medical Terminology & Vocabulary	3	0	3
	ELECTIVE			3
				16

Third Quarter				
ENG 103	English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 108	Shorthand III	3	2	4
BUS 280M	Medical Terminology & Vocabulary	3	0	3
BIO 104	Anatomy and Physiology	3	3	4
				17

Fourth Quarter				
SPH 101	Fundamentals of Speech	3	0	3
BUS 206M	Dictation & Transcription	3	2	4
BUS 205	Advanced Typing	2	3	3
BUS 131	Accounting I	2	3	3
	ELECTIVE			3
				16

Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 207M	Dictation & Transcription	3	2	4
BUS 214	Secretarial Procedures	3	2	4
BUS 110	Office Machines I	2	2	3
BUS 210	Filing	3	0	3
				17

Sixth Quarter				
BUS 208M	Dictation & Transcription	3	2	4
BUS 209	Production Typing	2	3	3
BUS 215	Office Application	3	12	6
	ELECTIVE			3
				16

LEGAL SECRETARIAL PROGRAM

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 105	Business Math	5	0	5
BUS 115	Business Law I	3	0	3
				18

Second Quarter				
ENG 102	English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 107	Shorthand II	3	2	4
BUS 131	Accounting I	2	3	3
	ELECTIVE			3
				16

Third Quarter				
ENG 103	English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 108	Shorthand III	3	2	4
	ELECTIVES			6
				16

Fourth Quarter				
SPH 101	Fundamentals of Speech	3	0	3
BUS 205	Advanced Typing	2	3	3
BUS 206L	Dictation & Transcription	3	2	4
BUS 110	Office Machines I	2	2	3
	ELECTIVE			3
				16

Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 207L	Dictation & Transcription	3	2	4
BUS 214	Secretarial Procedures	3	2	4
BUS 210	Filing	3	0	3
	ELECTIVE			3
				17

Sixth Quarter				
BUS 208L	Dictation & Transcription	3	2	4
BUS 209	Production Typing	2	3	3
BUS 215	Office Application	3	12	6
				13

GENERAL OFFICE TECHNOLOGY PROGRAM

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 105	Business Math	5	0	5
BUS 115	Business Law 1	3	0	3
	ELECTIVE			3
				17

Second Quarter				
ENG 102	English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 118	Machine Transcription	2	3	3
BUS 101	Introduction to Business	3	0	3
BUS 131	Accounting I	2	3	3
				15

Third Quarter				
ENG 103	English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 119	Machine Transcription	2	3	3
BUS 132	Accounting II	2	3	3
	ELECTIVE			3
				15

Fourth Quarter				
SPH 101	Fundamentals of Speech	3	0	3
BUS 110	Office Machines I	2	2	3
EDP 104	Introduction to Data Processing	3	0	3
BUS 218	Machine Transcription	2	3	3
	ELECTIVE			3
				15

Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 111	Office Machines II	2	2	3
BUS 210	Filing	3	0	3
BUS 219	Machine Transcription	2	2	3
	ELECTIVE			3
				15

Sixth Quarter				
BUS 209	Production Typing	2	3	3
	ELECTIVES			12
				15

AGRICULTURAL BUSINESS TECHNOLOGY PROGRAM

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
BUS 105	Business Math	5	0	5
BUS 102	Typing I	2	3	3
AGR 125	Animal Science	3	2	4
	ELECTIVE			3
				18

Second Quarter				
ENG 102	English II	3	0	3
AGR 185	Soil Science	3	2	4
BUS 131	Accounting I	2	3	3
	ELECTIVES			4
				14

Third Quarter				
ENG 103	English III	3	0	3
AGR 104	Introduction to Ag. Economics	3	0	3
AGR 170	Plant Science	3	2	4
	ELECTIVES			5
				15

?ourth Quarter				
SPH 101	Fundamentals of Speech	3	0	3
	ELECTIVES			15
				18

ifth Quarter				
NG 206	Business Communications	3	0	3
GR 205	Agricultural Marketing	3	0	3
	ELECTIVES			9
				15

xth Quarter				
JS 229	Taxes	2	3	3
	ELECTIVES			12
				15

ELECTRONICS TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
MAT 110	Technical Mathematics I	5	0	5
PHY 101	Physics: Mechanics	3	2	4
DFT 101	Technical Drafting I	1	5	3
ELC 101	Fundamentals of Electricity I	4	5	6
		16	12	21
Second Quarter				
ENG 102	English II	3	0	3
MAT 111	Technical Mathematics II	5	0	5
PHY 102	Physics: Properties of Matter	3	2	4
ELC 102	Fundamentals of Electricity II	4	6	6
	Elective			3
		15	8	21
Third Quarter				
ENG 103	English III	3	0	3
MAT 112	Technical Mathematics III	5	0	5
ELC 103	Fundamentals of Electricity III	8	8	10
		16	8	18
Fourth Quarter				
SPH 101	Fundamentals of Speech I	3	0	3
MAT 201	Technical Mathematics IV	5	0	5
PHY 104	Physics: Light and Sound	3	2	4
ELN 201	Applications of Vacuum Tubes and Transistors	5	5	7
		16	7	19
Fifth Quarter				
DFT 104	Electronic Drafting	2	3	3
ELN 202	Vacuum Tubes and Semiconductor Devices	7	5	9
	Social Science Electivs	3	0	3
		12	8	15
Sixth Quarter				
ELN 203	Industrial Electronics and Systems	7	6	10
	Social Science Elective	3	0	3
	Elective			3
		10	6	16

DRAFTING AND DESIGN TECHNOLOGY (MECHANICAL)

First Quarter		Lec.	Lab.	Credit
ENG 101	English I	3	0	3
MAT 110	Technical Mathematics I	5	0	5
PHY 101	Physics: Mechanics	3	2	4
DFT 101	Technical Drafting I	1	5	3
MEC 101	Machine Processes I	1	5	3
		13	12	18
Second Quarter				
ENG 102	English II	3	0	3
MAT 111	Technical Mathematics II	5	0	5
PHY 102	Physics: Properties of Matter	3	2	4
DFT 102	Technical Drafting II	1	5	3
MEC 102	Machine Processes II	1	5	3
		13	12	18
Third Quarter				
ENG 103	English III	3	0	3
MAT 112	Technical Mathematics III	5	0	5
PHY 103	Physics: Electricity	3	2	4
PHY 106	Applied Mechanics	5	0	5
DFT 103	Technical Drafting III	1	5	3
		17	7	20
Fourth Quarter				
SPH 101	Fundamentals of Speech I	3	0	3
DFT 201	Technical Drafting IV	2	6	4
DFT 204	Descriptive Geometry	2	4	4
MEC 205	Strength of Materials	3	2	4
MEC 210	Physical Metallurgy	3	3	4
		13	15	19
Fifth Quarter				
	Social Science Elective	3	0	3
DFT 205	Design Drafting I	2	6	4
DFT 211	Machanisms	3	2	4
MEC 211	Physical Metallurgy	3	3	4
	Elective	4	0	4
		15	11	19
Sixth Quarter				
	Social Science Elective	3	0	3
DFT 206	Design Drafting II	2	6	4
MEC 235	Hydraulics and Pneumatics	3	3	4
	Elective	3	0	3
DFT 212	Jig and Fixture Design	2	4	4
		13	13	18

SURRY COMMUNITY COLLEGE
NURSING PROGRAM

Class Entering September 1972

The growing demand for hospital nursing service makes nursing one of the brightest career fields today and for the future. Surry Community College Martin Memorial Nursing Program emphasizes preparation of the hospital staff nurse, but graduates can also look forward to promising opportunities in clinics and other health care agencies regardless of geographic location.

The course of study leading to an Associate Degree in Nursing is designed to prepare qualified students for technical nursing. Preparation includes the care of children and adults in medical, surgical and psychiatric situations. Also included is preparation in maternal and infant health. Nursing courses have a balance of classroom theory, individualized study and laboratory practice in hospitals, clinics, and other health care agencies.

The A. D. curriculum is covered in seven quarters, including one summer session. It also includes a broad exposure to liberal arts as well as nursing. Upon successful completion of the program, students receive an Associate in Applied Science degree and are qualified to take the State Board Test Pool licensing examination for registration as a nurse.

Students are admitted to the nursing program following evaluation of high school transcripts, recommendations, scholastic aptitude test, medical and dental examinations, and a personal interview with a member of the nursing faculty.

(The letter C indicates class hours per week; L, laboratory hours per week; CH, credit hours per quarter.)

ASSOCIATE DEGREE NURSING PROGRAM

		C	L	CH
FIRST QUARTER (fall)				
NUR 101	Nursing I (Intro. to Nursing)	4	6	6
BIOL 104	Anatomy and Physiology	3	3	4
ENGL 101	Freshman English I	3	0	3
PSYCH 101	General Psychology I	3	0	3
CHEM	Chemistry for Health Occupations	2	2	3
		15	11	19
SECOND QUARTER (winter)				
NUR 102	Nursing II (Children & Adults)	5	10	8
BIOL 105	Anatomy and Physiology	3	3	4
BIOL	Microbiology for Health Occupations	3	3	4
		11	16	16
THIRD QUARTER (spring)				
NUR 103	Nursing III (Mothers & Infants)	5	10	8
ENGL 103	Freshman English II	3	0	3
PSHCH	Growth and Development	3	0	5
PSYCH 102	General Psychology II	3	0	3
		14	10	17
FOUTH QUARTER (summer)				
NUR 104	Nursing IV (Bahovioral Disorders)	5	9	8
		10	18	8
FIFTH QUARTER (fall)				
NUR 205	Nusing V (Physical/Mental Illness)	5	12	9
	Elective in Humanities	3	0	3
ENGL 103	Freshman English III	3	0	3
PHY ED 101	Physical Education	0	2	1
		11	15	16
SIXTH QUARTER (winter)				
NUR 206	Nursing VI (Children & Adolescents	5	12	9
	Elective in Humanities	3	0	3
SOC 201	Introduction to Sociology	3	0	3
PHY ED 102	Physical Education	0	2	1
		11	14	16
SEVENTH QUARTER (spring)				
NUR 207	Nursing VII (Physical/Mental Illness & Team Leadership)	5	15	10
NUR 208	Nursing Trends	2	0	2
PHY 110	Physics for Health Occupations	2	2	3
PHY ED 103	Physical Education	0	2	1
		9	19	16

VOCATIONAL DIVISION

(Diploma)

The objectives of the vocational programs at Surry Community College are to prepare individuals for initial employment in recognized skilled occupations, to re-train for entering new occupations, to advance in a given occupation by updating or upgrading skills and knowledge, to develop an understanding of the American free enterprise system, and to develop an interest in the betterment of our society.

Vocational programs require one full year of participation for students on a full-time basis. Courses will be available during the day and during the evening for students desiring to enroll on a part-time basis.

PROGRAMS OF STUDY

The diploma is granted upon the successful completion of one of the following one-year programs:

Power Mechanics—Automotive

Welding

Electrical Installation and Maintenance

Drafting

Machinist

Light Construction — Cooperative

Admission to a Program

These programs are open to any high school graduate or person 18 years of age or over who shows promise of successfully completing the program. Students with deficiencies in subjects basic to the program may be required to complete supplementary studies at the College prior to entering the program on a full-time basis.

AUTOMOTIVE MECHANICS

First Quarter		Lec.	Lab.	Credit
AUT 1111	Internal Combustion Engines	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
ENG 1101	Reading	2	0	2
PHY 1101	Applied Science I	3	2	4
		13	14	18

Second Quarter				
AUT 1112	Engine Electrical & Fuel Systems	5	12	9
ENG 1102	Communication Skills	3	0	3
DFT 1101	Schematics and Diagrams.			
	Power Mechanics	0	3	1
PHY 1102	Applied Science II	3	2	4
		11	17	17

Third Quarter				
AUT 1123	Automotive Chassis and Suspension Systems	3	9	6
AUT 1121	Braking Systems	3	3	4
PSY 1101	Human Relations	3	0	3
AUT 1101	Automotive Air Conditioning	2	3	3
WLD 1101	Basic Gas Welding	0	3	1
		11	18	17

Fourth Quarter				
AUT 1124	Automotive Power Train Systems	3	9	6
AUT 1125	Automotive Servicing	3	9	6
BUS 1103	Small Business Operations	3	0	3
		9	18	15

WELDING

		Lec.	Lab.	Credit
First Quarter				
WLD 1120	Oxyacetylene Welding & Cutting	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
DFT 1104	Blueprint Reading: Mechanical	0	3	1
PHY 1101	Applied Science I	3	2	4
ENG 1101	Reading	2	0	2
		13	17	19
Second Quarter				
WLD 1121	Arc Welding	3	12	7
MAT 1103	Geometry	3	0	3
DFT 1117	Blueprinting Reading: Welding	0	3	1
PHY 1102	Applied Science II	3	2	4
ENG 1102	Communication Skills	3	0	3
		12	17	18
Third Quarter				
WLD 1124	Pipe Welding	3	12	7
WLD 1123	Inert Gas Welding	1	3	2
WLD 1112	Mechanical Testing and Inspection	1	3	2
DFT 1119	Applied Mechanical Drawing I	1	5	3
PSY 1101	Human Relations	3	0	3
		9	23	17
Fourth Quarter				
WLD 1122	Commercial and Industrial Practices	3	9	6
WLD 1125	Certification Practices	3	6	5
MEC 1112	Machine Shop Processes	1	5	3
BUS 1105	Industrial Organizations	3	0	3
		10	20	17

DRAFTING

First Quarter		Lec.	Lab.	Credit
DFT 1121	Drafting I	3	12	7
ENG 1101	Reading	2	0	2
MAT 1101	Fundamentals of Math	3	0	3
PHY 1101	Applied Science I	3	2	4
MEC 101	Machine Processes I	1	5	3
		12	19	19
Second Quarter				
DFT 1122	Drafting II	3	6	5
DFT 204	Descriptive Geometry	2	4	4
MAT 1103	Geometry	3	0	3
PHY 1101	Applied Science II	3	2	4
MEC 102	Machine Processes II	1	5	3
		12	17	19
Third Quarter				
DFT 1131	Drafting III	3	6	5
MAT 1104	Trigonometry	3	0	3
PSY 1101	Human Relations	3	0	3
MEC 1115	Treatment of Ferrous Metals	2	3	3
DFT 106	Architectural Drawing I	2	4	4
		13	13	18
Fourth Quarter				
DFT 1132	Drafting IV	3	12	7
BUS 1105	Industrial Organization	3	0	3
MEC 1116	Treatment of Non-Ferrous Metals	2	3	3
DFT 107	Architectural Drawing II	2	4	4
		10	19	17

MACHINIST

First Quarter		Lec.	Lab.	Credit
MEC 1101	Machine Shop Theory and Practice	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
DFT 1104	Blueprint Reading — Machanical	0	3	1
PHY 1101	Applied Science I	3	2	4
ENG 1101	Reading	2	0	2
		13	17	19

Second Quarter				
MEC 1102	Machine Shop Theory and Practice	3	12	7
MAT 1103	Geometry	3	0	3
DFT 1105	Blueprint Reading — Mechanical	0	3	1
PHY 1102	Applied Science II	3	2	4
ENG 1102	Communication Skills	3	0	3
WLD 1102	Basic Arc Welding	0	3	1
		12	20	19

Third Quarter				
MEC 1103	Machine Shop Theory and Practice	3	12	7
MEC —5	Treatment of Ferrous Metals	2	3	3
PSY 1101	Human Relations	3	0	3
MAT 1104	Trigonometry	3	0	3
DFT 1119	Applied Mechanical Drawing I	1	5	3
		12	20	19

Fourth Quarter				
MEC 1104	Machine Shop Theory and Practice	3	12	7
MEC 1116	Treatment of Non-Ferrous Metals	2	3	3
WLD 1101	Basic Gas Welding	0	3	1
BUS 1105	Industrial Organization	3	0	3
DFT 1120	Applied Mechanical Drawing II	1	5	3
		9	23	17

COOPERATIVE LIGHT CONSTRUCTION

(Alternating Weeks In Class and On The Job)

First Quarter (Summer) Carpentry		Lec.	Lab.	Credit
CAR 1101	Carpentry Fundamentals	4	16	6
SAF 1101	Safety & First Aid	2	0	2
DFT 1110	Blueprint Reading (Building Trades)	0	3	1
	On Job Training App. 200 Hrs. Per Quarter			10
		6	19	19

Second Quarter (Fall) Masonry				
MAS 1101	Masonry Fundamentals	3	12	5
ENG 1101	Reading	2	0	2
CAR 1114	Building Codes	3	0	3
CAR 1102	Framing	1	4	2
	On Job Training App. 200 Hrs. Per Quarter	0	0	10
		9	16	22

Third Quarter (Winter) Cabinet Making				
CAB 1101	Cabinet Making	4	16	6
MAT 1112	Building Trades Math	3	0	3
PSY 1101	Human Relations	3	0	3
	On Job Training App. 200 Hrs. Per Quarter	0	0	10
		10	16	22

Fourth Quarter (Spring) Plumbing				
PLU 1101	Plumbing Fundamentals	3	12	5
BUS 1103	Small Business Operations	3	0	3
MAT 1113	Construction Estimating	3	0	3
CAR 1103	Trim & Finishing	1	4	2
	On Job Training App. 200 Hrs. Per Quarter	0	0	10
		10	16	23

ELECTRICAL INSTALLATION & MAINTENANCE

First Quarter		Lec.	Lab.	Credit
ELC 1112	Direct and Alternating Current	5	12	9
ENG 1101	Reading	2	0	2
MAT 1114	Electrical Math	5	0	5
PHY 1101	Applied Science I	3	2	4
		15	14	20

Second Quarter				
ELC 1113	Alternating Current and Direct Current Machines and Controls	5	12	9
DFT 1110	Blueprint Reading: Building Trades	3	0	3
ENG 1102	Communication Skills	3	0	3
PHY 1102	Applied Science II	3	2	4
		11	17	17

Third Quarter				
ELC 1124	Residential Wiring	5	9	8
ELN 1118	Industrial Electronics	3	6	5
PSY 1101	Human Relations	3	0	3
DFT 1113	Blueprint Reading: Electrical	0	3	1
		11	18	17

Fourth Quarter				
ELC 1125	Commercial and Industrial Wiring	5	12	9
ELN 1119	Industrial Electronics	3	6	5
BUS 1103	Small Business Operations	3	0	3
		11	18	17

COURSES OF INSTRUCTION

COURSE NUMBERING SYSTEM

Course designations consist of a three-or four-letter prefix and a number that indicate the curriculum and the level of the course. Freshman level courses are indicated by numbers ranging between 100-200; sophomore level courses 200-300. The 1100 numbering series designates courses in the vocational programs. On the same line, following the number. appear the course title. the number of lecture and laboratory hours per week, and the number of quarter hours earned by successfully completing the course.

AGRICULTURE

AGR 104—Introduction to Agricultural Economics 3 0 3

An introduction to economics, the functions of the economic system and agriculture's role in the economy. A review of the functions of the manager and an introduction to the principles he uses in making decisions to adjust to changing conditions. Analysis of the main sources of change which affect agricultural firms.

AGR 125—Animal Science 3 2 4

An introductory animal science course covering the fundamental principles of lievstock production. A study of the animal body and the basic principles of reproduction, genetics, growth, fattening, digestion, along with the selection, feeding, improvement. processing, and marketing of livestock.

AGR 150—General Horticulture 3 2 4

A course dealing with horticulture principles and the application of plant science fundamentals to horticultural practices.

Prerequisite: AGR 170—Plant Science

AGR 170—Plant Science 3 2 4

An introductory general botany and crop science course covering the fundamental principles of the reproduction, growth, functions, and development of seed-bearing plants with application to certain commercially important plants in North Carolina.

AGR 180—General Poultry Science 3 2 4

An introduction to the science of poultry production. The major phases of the study include the history of the poultry industry; the anatomy and physiology of the chicken; the breeds and varieties; the breeding principles, the principles of incubation, brooding, rearing, feeding, housing, and management; marketing poultry products; and the science of disease and parasite prevention and control.

AGR 185—Soil Science and Fertilizers 3 2 4

A course dealing with basic principles of efficient classification, valuation, and management of soils; care, cultivation, and fertilization of the soil, and conservation of soil fertility.

AGR 201—Agricultural Chemicals 3 2 4

A study of farm chemical pesticides. their ingredients, formulation ,and farm application, with emphasis on the effective and safe use of chemicals in agricultural pest control.

AGR 204—Farm Business Management 3 0 3

A review of the functions of the manager of a business firm and the problems he faces. Development of the concept of planning by both partial and complete budgeting. Review of the concepts of costs and the lengths of run in production. Practice in preparing enterprise budgets as an aid in choosing what to produce. Use of partial budgeting to find the least cost production procedure. Analysis of production data to select the level of production that yields the most net revenue. Relationship between size, efficiency and income of a farm. Review of procedures for evaluating the efficiency of the manager.

Prerequisite: AGR 104.

AGR 205—Agricultural Marketing 3 0 3

As analysis of the functions of marketing in the economy and a survey of the problems marketing faces. A review of the market including foreign markets. Problems in the operations of marketing firms including buying and selling, processing, standardization and grading. risk taking and storage, financing, efficiency, and cooperation. Discussion of procedures of marketing such commodities as grain. cotton, livestock and tobacco.

AGR 218—Agricultural Mechanization 3 0 3

A study of farm machinery management and labor-saving devices. The economics of selection and operation of farm machinery. Study and evaluation of feed grinders and mixers, storage facilities, materials handling systems and other labor-saving devices.

AGR 222—Agricultural Construction 3 2

A study of practical planning of housing systems for humans, livestock, farm commodities, and equipment storage. The design will be related specifically to layout procedures, materials of construction, structural features, and cost estimating. There will be practical exercises in preparing sketches, blueprint reading, and job planning.

AGR 228—Livestock Diseases and Parasites 3 2

A course dealing with the common diseases and parasites of livestock; sanitation practices and procedures with emphasis on the cause, damage, symptoms, prevention and treatment of parasistes and diseases, and management factors relating to disease and parasite prevention and control.

Prerequisite: AGR 125.

AGR 271—Field Crops 3 0

A study of crop species grown in southeastern United States and their place in the farm and economics programs. An application of the principles of crop production will be given for the major grain, oil, fiber, and special crops. The study will include the cultural practices, disease, and insect control. fertilization, weed control, grading and marketing of all field crops.

Prerequisite: AGR 170—Plant Science.

AGR 272—Tobacco Technology 3 0

All phases of tobacco production and marketing will be discussed. The latest research problems and findings dealing with this important cash crop will be discussed in relation to types of tobacco; the development and selection of varieties, plant production, diseases and insect control. soils, fertilization, cultural practices, harvesting, curing, grading, marketing, and manufacturing as it influences cultural practic

ART

ART 101—Art History I 3 0 3

A general survey of art history against the background of Western culture. The periods of art from the antique through the Gothic will be studied in relation to their political, religious, and social setting.

ART 102—Art History II 3 0 3

An historical survey of the arts and artists of Europe from the Renaissance to twentieth century art and architecture.

ART 130—Introduction to Art 3 0 3

A beginner's course for those interested in learning to look at, appreciate, and enjoy the visual arts. The elements used to create a work of art are studied through discussion, reference to art works of the past and present, and actual experimentation in the various art media.

ART 131—Drawing I 3 0 3

The student is encouraged to discover an individual approach to the problems relating to expression and communication in graphic art. Areas of study include life drawing, stressing line, form and contour; landscape and city scape drawing. stressing the elements of proportion, composition and perspective. The student becomes familiar with several graphic media.

ART 132—Drawing II 3 0 3

A continuation of Art 131 emphasizing training in anatomy and life drawing. The relationship of medium to subject and historic and contemporary idioms will be analyzed.

Prerequisite: Art 131.

ART 133—Arts and Crafts 3 2 4

Provides for the acquisition of skills in the use of varied materials such as art metals, leather, plastics, papier-mache, and linoleum blocks. Designed for teacher education and religious education majors. Also valuable for hobby and leisure time activities. Laboratory periods.

ART 201—Painting I 3 0 3

A beginner's course in oil painting. Composition and color values are stressed. Subject matter: still-life and figure. The student is introduced to technical problems such as color mixing, use of palette, use of color wheel. and brush techniques. Composition and color theory are an integral part of this course.

ART 202—Painting II 3 0 3

A continuation of ART 201—Painting I. Use of full color palette, nonobjective composition, still life, and figure painting. Continual emphasis upon composition and color theory.

ART 203—Painting III 3 0 3

A continuation of ART 202—Painting II. Landscape painting, figure painting. still life, color, values, and composition are stressed.

ART 204—Painting: Water Color 3 0 3

Water color: transparent water color used for still life, flowers, and landscape compositions. Field trips offer opportunity to paint local mountain scenery.

AUTOMOTIVE

AUT 1101—Automotive Air Conditioning 2 3 3

General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of operation. and control; proper handling of refrigerants in charging the system.

AUT 1111—Internal Combustion Engine 3 12 7

Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the cnostruction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cam and camshafts, fuel and exhaust system, cooling systems, proper lubrication; and methods of testing, diagnosing and repairing.

AUT 1112—Engine Electrical and Fuel Systems 5 12 9

A thorough study of the electrical and fuel systems of the automobile. Battery cranking mechanism, generator, ignition, accessories and wiring, fuel pumps, carburetors, and fuel injectors. Characteristics of fuels, types of fuel systems, special tools. and testing equipment for the fuel and electrical system.

AUT 1121—Braking Systems 3 3 4

A complete study of various braking systems employed on automobiles and lightweight trucks. Emphasis is placed on how they operate. proper adjustment, and repair.

Prerequisite: PHY 1102.

AUT 1123—Automotive Chassis and Suspension Systems 3 9

Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of suspension and steering systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, and front end alignment.

AUT 1124—Automotive Power Train Systems 3 9

Principles and functions of the automotive power train system: clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing and repair.

AUT 1125—Automotive servicing 3 9

Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Troubleshooting of automotive systems, providing a full range of experiences in testing, adjusting, repairing and replacing.

Prerequisites: AUT 1123, AUT 1121, AUT 1101.

BIOLOGY

BIO 101—General Biology 3 3 4
This course is designed to familiarize the student with the basic principles, problems, and similarities of living organisms. Emphasis is placed upon the chemical and morphological basis of life.

BIO 102—General Biology II 3 3 4
This course will acquaint the student with the perpetuation of life. development of the organism, and the formation of organism populations and communities.
Prerequisite: BIO 101.

BIO 103—General Biology III 3 3 4
An application of the principles acquired in Biology 101 and 102 will be utilized to give the student an appreciation of the origin and diversity of life in the plant and animal kingdoms.
Prerequisites: BIO 101. 102.

BIO 104, 105—Anatomy and Physiology 3 3 4
This is a basic course of the structure and function of the human body as related to nursing training. The body as an integrated whole, the moving body, body control, maintaining the metabolism of the body, reproduction, and control of body functions are the major topics of instruction. The laboratory sessions are correlated with the material in the lecture sessions to give the student practical experience in the basic phases of the course.

BIO 106—Microbiology 3 3 4
A study if microbiology as related to health occupations. Course includes study of pathogenic micro organisms: bacteria, fungi, viruses, rickettsia and animal parasites.

BIO 111—Nutrition 3 0 3
A study of the essentials of an adequate diet. Topics considered are energy, protein, mineral and vitamin requirements, metabolism, deficiencies in the diet and their effects. and diet in relation to age and physical condition.

BIO 201—Local Flora 3 4 5
A field and laboratory study of local flora concerned with their classification, identification, and ecology by the use of keys and field studies.
Prerequisites: BIO 101, 102, 103.

BIO 202—Invertebrate Zoology 3 3 4
An advanced study of taxonomy. morphology, physiology, and the development of invertebrates stressing the major phyla.
Prerequisites: BIO 101, 102. 103.

BIO 203—Comparative Vertebrate Anatomy 3 4 5
An anatomical study of representative vertebrates including considerations of their morphology, physiology. ecology, and evolution.
Prerequisites: BIO 101, 102, 103.

BUSINESS

BUS 101—Introduction to Business 3 0 3

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing. internal organization. and management.

BUS 102—Typewriting I 2 3 3

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

BUS 103—Typewriting II 2 3 3

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript correspondence, and business forms.

Prerequisite: BUS 102 or the equivalent. Speed requirement, 30 words per minute for five minutes.

BUS 104—Typewriting III 2 3 3

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript. correspondence, and business forms.

Prerequisite: BUS 103 or the equivalent. Speed requirement, 40 words per minute for five minutes.

BUS 105—Business Mathematics 5 0 5

This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount. commission, taxes, and pertinent uses of mathematics in the field of business.

BUS 106—Shorthand I 3 2 4

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.

BUS 107—Shorthand II 3 2 4

Continued study of theory with greater emphasis on dictation and elementary transcription.

Prerequisite: BUS 106 or the equivalent.

BUS 108—Shorthand III 3 2 4

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.

Prerequisite: BUS 107.

BUS 110—Office Machines I 2 2 3

A general survey of business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines. full keyboard machines, and calculators.

BUS 111—Office Machines II 2 2 3

Instruction in the operation of the bookkeeping-accounting machines, duplicating equipment, and the dictating and transcribing machines.

Prerequisite: BUS 110.

BUS 115—Business Law I 3 0 3

A general course designed to acquaint the student with certain fundamentals and principles of business law. including contracts, negotiable instruments. and agencies.

BUS 116—Business Law II 3 0 3

Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership - corporation, mortgages, and property rights.

Prerequisite: BUS 115.

BUS 117—Business Law III 3 0 3

Continuation of business law stressing guaranty and suretyship, insurance, landlord and tenant liens, wills, trust and bankruptcy, and transportation.

Prerequisite: BUS 116.

BUS 118—Machine Transcription I 2 3 3

Machine transcription is designed to develop skill in operating a Transcribing Unit, to equip students with knowledge of many kinds of business documents so that they understand the use of such document and enable them to apply their knowledge skillfully, to build a fundamental knowledge of business vocabulary as well as the rules of grammar, punctuation, and spelling, and to develop understanding of secretarial procedures and responsibilities in business.

BUS 119—Machine Transcription II 2 3 3

A continuation of the objectives and skills in BUS 118.

BUS 123—Business Finance 3 0 3

Financing of business units, as individuals, partnerships, corporations and trusts. A detailed study is made of short-term. long-term, and consumer financing.

BUS 131—Principles of Accounting I 2 3 3

A study of the procedures of accounting and theory underlying those procedures. Introduction to double entry accounting.

BUS 132—Principles of Accounting II 2 3 3

A continuation of accounting theory developed in BUS 131 with concentration on single proprietorship and partnerships through the use of balance sheets, income statements and other accounting forms.

Prerequisite: BUS 131.

BUS 133—Principles of Accounting III 2 3 3

A study of accounting as applicable to corporations with a comparison between accounting records as they differ between privately owned and corporately owned enterprises.

Prerequisite: BUS 132.

BUS 180-M—Medical Terminology and Vocabulary 3 0 3

To develop an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business, technical, and professional offices.

BUS 205—Advanced Typewriting 2 3 3

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation, and the typing of reports, manuscripts and legal documents.

Speed requirement. 40 words per minute for 5 minutes to be admitted to the course.

BUS 206-E. 206-M, or 206-L—Dictation and Transcription 3 2

Develops the skill of taking dictation and of transcribing at the typewriter, materials appropriate to the course of study, which include a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 10 words per minute required for 5 minutes on new material.

BUS 207—Dictation and Transcription 3 2 4

Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 110 words per minute required for 5 minutes on new material.

BUS 208—Dictation and Transcription 3 2 4

Principally a speed building course, covering materials appropriate to the course of study, with emphasis as well on accuracy. Minimum dictation rate of 10 words per minute required for 5 minutes on new material.

Prerequisites: BUS 207.

BUS 209—Production Typing 2 3 3

Printed business forms are used to develop accuracy and speed. Designed as a pre-employment review of typing techniques.

BUS 210—Filing 3 0 3

Filing will cover what records to keep, how to store them, how to find them quickly when needed, and how to apply the criteria for determining their dispositisn or retention. Included are rules for alphabetic indexing, procedures for the operation and control of filing methods and systems; principles for the selection of records equipment and supplies.

BUS 211—Stenoprint 2 2 4

Students receive training in the techniques, operation, and application of a Stenoprint machine.

BUS 214—Secretarial Procedures 3 2 4

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. These include the following: receptionist duties. handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims.

BUS 215—Office Application 3 12 6

During the sixth quarter only, students are assigned to work in a business, technical, or professional office for 12 hours a week. The objective is to provide actual work experience for secretarial students and an opportunity for the practical application of the skills and knowledge previously learned according to the course of study.

Prerequisites: BUS 214. BUS 205, BUS 207.

BUS 218—Machine Transcription III 2 3 3

This course is developed to teach more efficient operation of transcribing equipment and good transcribing techniques. It includes further training in the fundamentals of spelling, grammar, and punctuation, and acquaints the student with business terminology and the various kinds of business communications.

BUS 219—Machine Transcription IV 2 3 3

A continuation of BUS 218.

BUS 229—Taxes 3 0 3

Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise, and inheritance

Prerequisite: BUS 131.

BUS 235—Business Management 3 0 3

Principles of business management including overview of major functions of management, such as planning, staffing, controlling, directing and financing. Clarification of the decision-making function. Role of management in business-qualifications and requirements.

BUS 239—Marketing 3 0 3

A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing processes.

BUS 243—Advertising 3 0 3

The rose of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals; product and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media.

BUS 251, 252, 253—Cost Accounting I, II, III 2 3 3

This course is designed to develop the principles used in accounting to aid management in their planning, controlling, and analyzing of cost data. The areas studied include budgets, job and process costing, estimates and standard costing, direct costing, and break-even analysis.

Prerequisite: BUS 133.

BUS 271—Office Management 3 0 3

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions. office automation, planning, controlling, organizing and actuating office problems.

BUS 272—Principles of Supervision 3 0 3

Introduces the basic responsibilities and duties of the supervisor and his relationship to supervisors. subordinates, and associates. Emphasis on securing an effective work force and the role of the supervisor. Methods of supervision are stressed.

BUS 273—Elements of Retailing 3 0 3

This course is designed to help students understand retailing from the viewpoint of the owner or manager. Topics studied: organization of the retail firm, establishment of stores, customer needs, purchasing and financing, advertising and selling, planning and control.

BUS 274—Personnel Management 3 0 3

The techniques of supervising and coordinating the work of others. Among the items covered are employment interview techniques, training procedures, supervision of employees, delegating authority and responsibility factors influencing employees' morale, job studies and descriptions, current policies on labor-management relations and labor legislation affecting business workers.

BUS 275—Principles of Insurance 3 0 3

Types and provisions of life, property and casualty insurance from the point of view of an individual and business enterprise.

BUS 280-M—Medical Terminology and Vocabulary 3 0 3

Greater emphasis on an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business.

Prerequisite: BUS 180-M.

BUS 1103—Small Business Operations 3 0 3

An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices. methods of improving business. and employer-employee relations.

BUS 1105—Industrial Organizations 3 0 3

Methods, techniques, and practices of modern management in planning, organizing and controlling operations of a manufacturing concern. Introduction to the competitive system and the factors constituting product cost.

CARPENTRY

CAB 1101—Cabinet Making 4 16 6

General cabinet making and millwork for building construction. Practical applications will include measuring, layout and construction of various types of cabinets and trim.

CAR 1101—Carpentry Fundamentals 4 16 6

An introduction to carpentry as a vocation; basic knowledge and skills in hand and power tools, laboratory experience in layout for excavation and footings, introduction to wall, ceiling, and roof structures.

CAR 1102—Framing 1 4 2

Course content includes laboratory experience in form construction, floor sills, girders, posts, and joists; wall framing for doors and windows; roof rafters, dormers and porches.

CAR 1103—Carpentry Trim and Finish 1 4 2

Course content includes the study of trim and finishing the inside and outside of buildings. A study of using a variety of woods and materials is included in this course.

CAR 1114—Building Codes 3 0

A study is made of building codes and the minimum requirement for local, country and state construction regulations. This involve safety, sanitation, mechanical equipment and materials.

CHEMISTRY

CHM 101—General Chemistry I 3 4 4

A course providing instruction in language of chemistry; fundamental chemistry laws and theories, preparation and properties of elements and their compounds.

CHM 102—General Chemistry II 3 3 4

A continuation of 101 to include the following concepts: chemical change. kinetic-molecular theory and atomic structure compound formation. Emphasis is placed on the mastery of formula and equation writing and of chemical calculations.

CHM 103—General Chemistry III 3 3 4

A continuation of 102 with emphasis placed on gas laws, calculation of formulas, weight and volume relationships, equivalent weight, standard solutions, chemical equilibrium, redox and electro chemistry. Introduction to organic and nuclear chemistry.

CHM 111—Chemistry for Health Occupations 3 3 4

Basic principles of organic, inorganic, and bio-chemistry are studied as they are related to practice in health occupations.

CHM 201—Qualitive Analysis 3 3 4

A course which extends the study of chemical principles to include equilibria of slightly soluble salts and of complex tons and systematic analysis. Laboratory consists of the qualitative analysis of both principles and techniques of separation and identification of inorganic cations and anions.

Prerequisite: Chm 103 or permission of instructor.

CHM 204, 205, 206—Organic Chemistry I, II. III 3 3 4

A year's course in the fundamentals of organic chemistry. The structure, physical properties, synthesis and typical reactions of the various series of aliphatic, alicyclic and aromatic compounds are studied with attention to reaction mechanisms. In the laboratory representative carbon compounds are synthesized with emphasis on basic laboratory techniques.

Prerequisites: CHM 101-102-103.

DATA PROCESSING

EDP 104—Introduction to Data Processing Systems 3 0 3

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detailed study of particular computer problems. This course is a prerequisite for all programming courses.

DRAFTING

DFT 101—Technical Drafting I 1 5 3

The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced.

DFT 102—Technical Drafting II 1 5 3

Application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, and sections and conventions will be studied. Most important is the introduction of the graphical analysis of space problems. Problems of practical design elements shall be studied. Dimensioning practices for "details" and "working drawing," approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects.

Prerequisite: DFT 101.

DFT 103—Technical Drafting III 1 5 3

Intersection and developments and their practical solutions, where applicable, model solutions accompany the problems. The various techniques employed to produce and render isometric and oblique drawings, isometric, dimetric and trimetric projections will be included.

Prerequisite: DFT 102.

DFT 104—Electronics Drafting 2 3 3

A continuation of skills and techniques in DFT 101 with special emphasis on electronic schematic diagrams and electronic circuit design.

DFT 106—Architectural Drafting I 2 4 4

An introduction to fundamental architectural drawing. Topics of study will include architect's scale, symbols, dimensioning, floor plans, sectional views and elevations of residential buildings.

DFT 107—Architectural Drafting II 2 4 4

A continuation of DFT 106. Further study of residential buildings with an introduction to industrial building. Projects completed in this two-course sequence will include producing the working drawings for a small residence and/or a small industrial plant.

DFT 201—Technical Drafting IV 2 6 4

Applications and constructions of charts, graphs, and nomographs in engineering and technical data. Screw threads, springs, keys, rivets, piping and welding symbols, methods of representing and specifying will be covered. Basic mechanisms of motion transfer, gears and cams, will be studied and drawn with emphasis on methods of specifying, calculating, dimensions, and dilineating.

Prerequisite: DFT 103.

DFT 204—Descriptive Geometry 2 4 4

Graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems will be stressed with analytical verification where applicable. Visualization shall be stressed on every problem.

Prerequisite: DFT 102.

DFT 205—Design Drafting I 2 6 4

Basic design is introduced in the study of motion transfer mechanisms as they relate to power trains. Principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings and simplified drafting practices constitute areas of study. Types and methods of specifying materials and workmanship are an integral part of the course.

Prerequisites: DFT 204, MAT 102, PHY 102.

DFT 206—Design Drafting II 2 6 4

Research to solve a problem in design by consulting various manuals, periodicals, and through laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly and sub-assembly drawings, pictorial drawings. exploded pictorial assembly, patent drawings and specifications are required as a part of the problem.

Prerequisite: DFT 205.

DFT 211—Mechanisms 3 2 4

Mathematics and drafting room solutions of problems involving the principles and machine elements. Study of motion linkages, velocities and acceleration of points within a link mechanism; layout methods for designing cams, belts, pulleys, gears and gear trains.

Prerequisites: DFT 201 and 204. MAT 103, PHY 106.

DFT 212—Jig and Fixture Design 2 4 4

Commercial standards, principles, practices and tools of jig and fixture design. Individual project and design work to acquaint students with the types of jigs and fixtures and their design.

Prerequisites: DFT 205. DFT 211.

DFT 1101—Schematics and Diagrams: Power Mechanics 0 3 1

Interpretation and reading of blueprints. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.

DFT 1104—Blueprint Reading: Mechanical 0 3 1

Interpretation and reading of blueprints. Information on the basic principles of blueprint; lines, views, dimensioning procedures and notes.

DFT 1105—Blueprint Reading. Mechanical 0 3 1

Further practice in interpretation of blueprints as they are used in industry; study of prints supplied by industry; making plans of operations; introduction to drafting room procedures; sketching as a means of communications.

Prerequisite: DFT 1104.

DFT 1110—Blueprint Reading: Building Trades 0 3 1

Principles of interpreting blueprints and trade specifications common to the building trades. Development of proficiency in making three view and pictorial sketches.

DFT 1112—Blueprint Reading and Sketching 0 3 1

Designed to develop abilities in reading complex drawings in the masonry field. Blueprints of residential and commercial buildings will be studied with emphasis on the plot plan, floor plan, basement and/or foundation plan, walls and various detailing drawings of masonry work.

DFT 1113—Blueprint Reading: Electrical 0 3 1

Interpretation of schematics, diagrams and blueprints applicable to electrical installations with emphasis on electrical plans for domestic and commercial buildings. Sketching schematics, diagrams, and electrical plans for electrical installations using appropriate symbols and notes according to the applicable codes will be a part of this course.

DFT 1117—Blueprint Reading: Welding 0 3 1

A thorough study of trade drawing in which welding procedures are indicated. Interpretation, use and application of welding symbols, abbreviations, and specifications.

Prerequisite: DFT 1104.

DFT 1119—Applied Mechanical Drawing I 1 5 3

DFT 1119 and DFT 1120 constitute a series of courses in mechanical drawing designed primarily for students enrolled in various vocational programs involving the production and/or interpretation of basic working drawings.

DFT 1119 is basically an introduction to mechanical drawing with emphasis on the following topics of study: Drafting Equipment, Geometric Constructions, Sketching Techniques and Instrument Drawing of Orthographic, Sectional, Job Planning, and Pictorial views. Standard practices of dimensioning basic machine parts will culminate this course.

DFT 1120—Applied Mechanical Drawing II 1 5 3

Continuation of study and practice in mechanical drawing. Basic studies will include detail dimensioning, tolerancing, auxiliary views, working drawings and the reproduction of drawings.
Prerequisite: DFT 1119.

DFT 1121—Drafting 3 12 7

An introduction to drafting and the study of drafting practices. Instruction is given in the selection, use and care of instruments, singlestroke lettering, applied geometry, freehand sketching consisting of orthographic and pictorial drawings. Orthographic projection, reading and instrument drawing of principal views, single auxiliary views (primary), and double (oblique) auxiliary views will be emphasized. Dimensioning and note practices will be studied with reference to the American Standards Association practices. Methods of reproducing drawings will be included at the appropriate time.

Prerequisite: None.

DFT 1122—Drafting 3 6 5

Sections and conventions will be studied and both detail and assembly sections will be drawn. Intersections and developments will be studied by relating the drawing to the sheet metal trades.

Methods of drawing and projecting avonometric, oblique, and perspective drawings will be studied with emphasis on the practical applications of pictorial drawings. Various methods of shading will be introduced and dimensioning and sectioning of oblique and axonometric pictorials will be done.

Prerequisite: DFT 1121.

DFT 1131—Mechanical Drafting 3 6 5

An introduction to mechanical drafting beginning with problems concerning precision and limit dimensioning. Methods of fastening materials, and fasteners: keys, rivets, springs, and welding. Symbols will be studied and drawings will be made involving these items. Principles of design will be introduced with the study of basic mechanisms of motion transfer; gears, cams. power trains, pulleys, belting and methods of specifying and calculating dimensions will be studied. Drawings will be made involving these mechanisms.

Prerequisite: DFT 1122.

DFT 1132—Mechanical Drafting 3 12 7

Principles of design sketching, design drawings, layout drafting, detailing from layout drawings, production drawings and simplified drafting practices constitute areas of study. Forging and casting and casting drawings will be made from layouts. Specifications, parts list and bill of materials are emphasized in this course. The student will develop a complete set of working drawings of a tool, jig, fixture or simple machine and learn principles of design, handbook and manual usage.

Prerequisite: DFT 1131.

EDUCATION

EDU 201, 202—Introduction to Education 3 0 3

A course designed to acquaint the prospective teacher with four major aspects of education: the teaching profession, the school system, the teacher, and the pupil. Two quarters.

EDU 203—Teacher's Aide Seminar 3 0 3

This course is a seminar for Teacher Aides. The course will include audiovisuals, bulletin board preparation, professional attitudes, and general school procedures. Resource personnel from the local school system will assist.

EDU 204—Teacher's Aide Internship 0 18 6

This course includes practical experiences in school work. The student will be placed on the job during the sixth quarter for a minimum of 18 hours per week. The new course may be waived by a statement from a school official that the student has been successfully employed in a teacher's aide capacity for the required hours (approximately 200 hours). **Teacher Aide program only.**

ECONOMICS

ECO 201-202-203—Principles of Economics 3 0 3

A study of the present-day economic system; demand, supply prices, and cost; wages, rent, interest, and profit; business cycles money, banking, and the Federal Reserve System; international trade and a comparison of Capitalism, Socialism, Communism, and Fascism (3 credits each quarter.)

ELECTRICITY

ELC 101—Electricity 1 4 5

Elementary principles of electricity including: basic electric units Ohm's law, Kirchoff's laws, network theorems, basic electrical measuring instruments, series circuits, parallel circuits, series-parallel circuits, direct current meters, and conductors and insulators. Elementary applications of devices are presented as well as laboratory experiments performed to illustrate the daily lessons.

ELC 102—Electricity II 4 6

Resistors, batteries, magnetism, electromagnetic induction, Lenz law, Faraday's law of inducted voltage, alternating voltage and current, inductance, inductive reactance, and inductive circuits. Electrical instruments and measuring techniques are studied in conjunction with laboratory experiments.

ELC 103—Electricity III 8 8 10

Capacitance, capacitive reactance, capacitive circuits, alternating-current circuits, complex numbers, resonance and filters. Laboratory experiments are performed to illustrate the daily lessons.

ELC 1102—Applied Electricity 2 3 3

The use and care of test instruments and equipment used in servicing electrical apparatus for air conditioning and refrigeration installation. Electrical principles and procedures for trouble-shooting of the various electrical devices used in air conditioning, heating, and refrigeration equipment. Included will be transformers, various types of motors and starting devices, switches, electrical heating devices and wiring.

Prerequisite: PHY 1101.

ELC 1112—Direct and Alternating Current 5 12 9

A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchoff's Law. A study of the sources of direct current voltage potentials. Fundamental concepts of alternating current flow, reactance, impedance, phase angle, power, and resonance. Analysis of alternating current circuits.

ELC 1113—Alternating Current and Direct current Machines and controls 5 12 9

Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis. The basic concepts of AC and DC machines and simple system controls. An introduction to the type control used in small appliances such as: thermostats, timers, or sequencing switches.

Prerequisites: ELC 1112, MAT 1115.

ELC 1124—Residential Wiring 5 9 8

Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications such as: services. switchboards, lighting, fusing, wire sizes, branch circuits, conduits, National Electrical Code regulations in actual building mockups.

Prerequisites: ELC 1113, DFT 1110.

ELC 1125—Commercial and Industrial Wiring 5 12 9

Layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation, and installation of simple systems.

Prerequisites: ELN 1118, ELC 1124.

ELECTRONICS

ELN 201—Vacuum Tubes and Transistors 5 5 7

A study in depth of the theory and electrical characteristics of vacuum tubes and sediconductors devices which includes: the diode, triode, multigrid and multiunit tubes, special purpose electron tubes, semiconductor diodes, convention transistors, special purpose transistor types and miscellaneous semiconductor devices. Laboratory experiments correlate with the lectures in such a manner to enable the student to learn the instruments and measurements required to become familiar with the above devices.

ELN 202—Applications of Vacuum Tubes and Semiconductor Devices 7 5 9

Practical application of vacuum tubes and semiconductor devices to basic electronic power supplies, amplifiers, audio amplifiers, radio frequency amplifiers, direct-coupled amplifiers, sinusoidal oscillators relaxation oscillators, triggered oscillators, modulation and demodulation, waveforms and wave shaping circuits, switching, gating, and counting circuits. Analysis and design of transistor circuits in regard to performance and limitations pertinent to reliable operations are considered. Appropriate laboratory experiments enable the student to become competent in their applications.

ELN 203—Industrial Electronics Systems 7 6 10

This course covers in fair depth the theory and applications of transducers, security devices, analog and digital computers and lasers. Special student projects of repair and assembly of electronic equipment is encouraged. The laboratory accompanying this course provides the student with a means of becoming familiar with the equipment and its practical uses.

ELN 1118—Industrial Electronics 3 6

Basic theory, operating characteristics, and application of vacuum tubes such as: diodes, triodes, tetrodes, pentodes, and gaseous control tubes. An introduction to amplifiers using triodes, power supplies using diodes, and other basic applications.

Prerequisite: ELC 1113.

ELN 1119—Industrial Electronics 3 6

Basic industrial electronic systems such as: motor controls, alarm systems, heating systems and controls, magnetic amplifier controls, welding control systems using thyatron tubes, and other basic types of systems commonly found in most industries.

Prerequisite: ELN 1118.

ENGINEERING

EGR 105—Graphics for Engineers I 2 4 3

Instruction in the use of drafting instruments, freehand drawing, and lettering. Theory of projection, including orthographic multiviews, auxiliary views, and the various kinds of pictoral projections. Sectional views and conventional practices, dimensioning and notations. Representation and specification of threads and fasteners, gears and cams. Working drawings, including limits and tolerances. Concurrent enrollment in College Algebra or higher.

EGR 106—Graphics for Engineers II 2 4 3

Basic descriptive geometry; systematic solutions and analysis of the relationships of points, lines, and planes in space; developments and intersections. Applications of graphics to various fields of engineering. Vector geometry, graphic mathematics, and nomography. Concurrent enrollment in College Trigonometry or higher.

ENGLISH

ENG 090—Remedial English 3 0 0

A course for the improvement and development of writing techniques including emphasis on meaningful and logical sentence construction, paragraph building, outline preparation and themes.

ENG 100—Reading I 1 2 1

A course to aid students in improving vocabulary and comprehension skills. Phonics, structural analysis, dictionary usage, critical reading, literal comprehension, and fluency and speed are considered.

ENG 110—Reading II 1 2 2

Designed to help the student improve his vocabulary, comprehension, speed, and study skills. Emphasis is placed upon word parts, sentence and paragraph meaning, paragraph patterns, outlining for comprehension and critical reading. Diagnostic testing, reading films, and tachistoscope are incorporated.

ENG 101—Freshman English I 3 0 3

This Course is designed to help the student enrich his knowledge of English grammar, punctuation, sentence and paragraph building, and the use of the dictionary. These mechanics of English will be applied to short themes as required.

ENG 102—Freshman English II 3 0 3

This course is a continuation of College English I, with frequent themes required. Conferences with individual students are recommended. There will be an introduction to principal literary forms by means of selections from modern authors and periodicals.

Prerequisite: English 101.

ENG 103—Freshman English III 3 0 3
This course emphasizes the development of good prose style and gives practice in the use of source materials. Longer themes and research papers will be required.

ENG 201—Survey of English Literature 3 0 3
A study of English Literature from **Beowulf** through Shakespeare.

ENG 202—Survey of English Literature 3 0 3
A study of English Literature from the Puritan Period through the Age of Reason.

ENG 203—Survey of English Literature 3 0 3
A study of English Literature from Romanticism to the present.

ENG 205—Report Writing 3 0 3
The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum.

Prerequisite: English 102

ENG 206—Business Communications 3 0 3
Develops skills in techniques in writing business communications. Emphasis is placed on writing action-getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, ackonwledgements, remittances, and inquiry.

Prerequisite: English 102.

ENG 210—Survey of American Literature 3 0 3
A study of the writings of the Colonial Period and the Romantic Period through Melville.

ENG 211—Survey of American Literature 3 0 3
A study of the literature of the Transcendentalists and the Realists through Twain.

ENG 212—Survey of American Literature 3 0 3
A study of the literature of American Naturalism, to the present.

ENG 1101—Reading Improvement 2 0 2
Designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition and train for comprehension in larger units.

ENG 1102—Communication Skills 3 0
Designed to promote effective communication through correct language usage in speaking and writing.

Prerequisite: ENG 1101.

FRENCH

FRE 101, 102, 103—Elementary French I, II, III 2 3 3

An introduction to French with a modern audio-ligulal approach. Up-to-date materials and methods. Emphasis first on hearing and speaking, then on reading and writing. Lab work is required as part of the course for those with no previous French or those who do not make a satisfactory score on the French placement test.

Prerequisite: Satisfactory score on college placement test.

FRE 151, 152, 153—Intermediate French I, II, III 2 3 3

A review of the skills or hearing, speaking, reading, and writing. Audio-lingual work in class and in lab. Selected supplementary readings.

Prerequisites: Two units of high school French and a satisfactory placement test score on FRE 101 and FRE 102.

FRE 201, 202, 203—Survey of French

Civilization I, II, III 2 3 3

The first of a two-course sequence. A study of French culture and civilization. Selected readings in French literature from the Middle Ages to the present. Parallel reading and reports.

Prerequisite: FRE 152.

GEOGRAPHY

GEO 201—Physical Geography 3 0 3

The earth's astronomical relations, factors of weather and climate, and physical features.

GEO 202—Economic Geography 3 0 3

Geographic factors involved in production, distribution, consumption, and conservation of the major crops, minerals, and industries of the world.

HISTORY

HIS 101, 103—History of Western Civilization 3 0 3

The institution and culture of Western society from 5,000 B.C. to the present. Topics include the classical Greek and Roman worlds, the growth of Christianity, Medieval Europe, the Renaissance, the Reformation, the emergence of the modern national state, the rise of commercial capitalism, the Industrial Revolution, the French Revolution, liberalism, nationalism, the alliance system, imperialism, World War II and its aftermath, and the ideologies of the twentieth century. Three quarters.

HIS 104—Modern History 3 0 3

A foundation for the study of current international problems styled primarily for technical and vocational students. Emphasis is on Europe and America in the nineteenth and twentieth centuries but in a world context and against a general background of ancient, medieval, and early modern history.

HIS 201, 202, 203—American History 3 0 3

A survey of American History from the period of discovery and colonization to the present. The course is conducted through lectures, text books, collateral reading, and map studies.

HIS 204—Current World Problems 3 0 3

A detailed examination of current international problems, including nationalism in underdeveloped countries, racial minorities, water and air pollution, the population explosion and famine. the armaments race, and international organizations—but with emphasis on a particularly urgent problem of present world concern. In addition to text and periodical assignments and daily newspaper readings, each student will be expected to present a comprehensive oral or written report.

MASONRY

MAS 1101—Masonry Fundamentals 3 12 5

An introduction to the various types of masonry construction, including brick, concrete blocks and concrete.

MATHEMATICS

MAT 80, 81, 82—Remedial Mathematics 3 0 0

A three-quarter, three-hour per week course consisting of an intensive study of pre-college algebra and geometry and of the arithmetical skills necessary in a study of college-level mathematics.

MAT 101, 102—College Mathematics I, II 3 0 3

A two-quarter course which, along with 103, will comprise the minimum college requirements for all AA degree candidates. These two quarters will consist of a study of sets, logic and axiomatic development of number systems (excluding complex numbers). Ideas of mathematical language and proof applied to elementary algebra. Some number theory including different bases, congruences, and modular systems. Brief treatment of probability and statistical methods. MAT 101 is a prerequisite for MAT 102. Three quarters hours each quarter.

MAT 103—College Mathematics III 3 0 3

A continuation in the spirit of 101-102 but including algebraic and graphical solutions of systems, linear equations and inequalities followed by elementary linear programming. Some finite and modern geometries and a non-analytical study of trigonometry. Attempts will be made to introduce the rudiments of plane analytic geometry at least through consideration of standard positions of the conic sections.

Prerequisite: MAT 101-102. Three quarter hours.

MAT 105, 106—College Algebra and Trigonometry 5 0 5

Designed to promote understanding of the logic structure of algebra and with the development of algebraic techniques, along with a study of analytic trigonometry. Topics include: the theory of sets of integers, rational numbers, real numbers, complex fields, equations, inequalities, functions and relations exponential and ligarithmic functions, trigonometric functions, identities, equations, circular functions, inverse functions, triangle solution including sine and cosine laws. matrices, and series. (5 hours credit each quarter.)

MAT 107—Analytic Geometry and Calculus I 5 0 5

A unified sequence in analytic geometry and differential and integral calculus. (This sequence is recommended for students in the sciences and engineering programs.) Prerequisite: Math 106 or the equivalent and consent.

MAT 110—Technical Mathematics I 5 0 5

The real number system is developed as an extension of natural numbers. Number systems of various bases are introduced. Fundamental algebraic operations, the rectangular coordinate system, as well as the fundamental trigonometric concepts and operations are introduced. The application of these principles to practical problems is stressed.

Prerequisite: Satisfactory evidence that admission requirements have been met.

MAT 111—Technical Mathematics II 5 0 5

The objective of this course is to develop an understanding of simultaneous equations, trigonometric functions, with applications and analysis, and the algebra of complex numbers. In addition, students continue to be given instruction in slide-rule operation with work in the accompanying handbook.

Prerequisite: MAT 110.

MAT 112—Technical Mathematics 5 0 5

The objective of this course is to develop an understanding of analytic geometry and the calculus. Instruction in slide-rule operation continues.

Prerequisite: MAT 111.

MAT 201—Technical Mathematics IV 5 0 5

A continuation of MAT 112. More advanced concepts of differen-

tiation and integration are considered. Included are graphs and derivativies of the trigonometric functions, exponetial and logarithmic differentiation and integration. advanced integration techniques, polar equations, and parametric equations.

Prerequisite: MAT 112.

MAT 205—Analytic Geometry and Calculus II 5 0 5

A continuation of Math 107. Topics include definite integrals; application to areas, volumes, arc lengths and work; exponetial and trigonometric functions; integration methods.

Prerequisite: MAT 107 or consent.

MAT 206—Analytic Geometry and Calculus III 5 0 5

A continuation of MAT 205. Included will be conics, moments, centers of gravity, indeterminate forms, improper integrals, series, two-dimensional vector algebra, and polar coordinates.

Prerequisie: MAT 205 or consent.

MAT 207—Analytic Geometry and Calculus IV 5 0 5

A continuation of MAT 206. Included are three-dimensional vector algebra, multiple integrals, line integrals, surface integrals, and change of variables.

Prerequisite: MAT 206 or consent.

MAT 208—Differential Equations 5 0 5

Special non-linear equations, linear equations, transformations, symbolic method; solutions in series; Gauss, Bessel and Legendre equations; simultaneous differential equations.

Prerequisite: MAT 205, 206, 207.

MAT 210—Introduction to Linear Algebra 5 0 5

A study of vectors, matrices, and determinants leading to a wide variety of problems in linear algebra that arise in mathematics and the natural sciences, engineering, business, and the social sciences.

MAT 1101—Fundamentals of Mathematics 5 0 5

Practical number theory. Analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry, measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.

MAT 1102—Algebra 3 0 3

Basic concepts and operations of algebra: historical background of our base-10 number system; algebraic operations: addition, subtraction, multiplication and division; fraction, letter representation, grouping, factoring, ratio and proportions, variation; graphical and algebraic solution of first degree equations; solution of simultaneous equations by: addition and subtraction, substitution, graphing, exponents, logarithms, table and interpolation.

MAT 1103—Geometry 3 0 3

Fundamental properties and definitions; plane and solid geometric figures, selected general theorems, geometric construction of lines, angles and plane figures. Dihedral angles, areas of plane figures, volumes of solids. Geometric principles are applied to shop operations.

MAT 1104—Trigonometry 3 0 3

Trigonometric ratios; solving problems with right triangles, using tables and interpolating; solution to oblique triangles using law of sines and law of cosines; graphs of the trigonometric functions; inverse functions, trigonometric equations.

Prerequisite: MAT 1103.

MAT 1112—Building Trades Mathematics 3 0 3

Practical problems dealing with volumes, weights, ratios, mensuration, and basic estimating practices for building materials.

MAT 1113—Construction Estimating 3 0 3

Basic methods of estimating quantities and cost of materials and labor for various types of construction.

MAT 1115—Electrical Mathematics 5 0 5

A study of fundamental concepts of algebra, basic operations of addition, subtraction, multiplication, anl division; solution of first order equations, use of letters and signs, grouping, factoring, exponents, ratios, and proportions; solutions of equations, algebraically and graphically; a study of logarithms and use of tables; an introduction to trignometric functions and their application to right angles; and a study of vectors for use in alternating current.

MECHANICS

MEC 101—Machine Processes I 1 5 3

An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of measuring instruments, characteristics of metals and cutting tools. The student will become familiar with the lathe family of machine tools by performing selected operations such as turning, facing, threading, drilling, boring and reaming.

MEC 102—Machine Processes II 1 5 3

Advanced operations on lathe, drilling, boring and reaming machines. Milling machine theory and practice. Thorough study of the types of milling machines, cutters, jig and fixture devices, and the accessories used in a modern industrial plant. Safety in the operational shop is stressed.

Prerequisite: MEC 101.

MEC 205—Strength of Materials 3 2 4

Study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying and dynamic. Analyses of these stresses are made as applied to thin-walled cylinders and sphere, riveted and welded joints, beams, columns and machine components.

Prerequisites: PHY 106, MAT 111.

MEC 210—Physical Metallurgy I 3 3 4

Introductory course in metallurgy, a basic study of the properties of metals and alloys. Analysis of the structure of metals and alloys, atomic structure, nuclear structure, and nuclear reactions. Solid (Crystalline) structures, methods of designing crystal planes; liquid and vapor phases; phase diagrams; and alloy systems.

Prerequisite: PHY 101.

MEC 211—Physical Metallurgy II 3 3 4

Properties of metals and alloys, the reactions of metals, diffusion, carburizing, metal bonding and homogenization; recrystallization and grain, growth, age hardening, nitriding, internal oxidation; heat treatment of steel; laboratory experiments and demonstrations.

Prerequisite: MEC 210.

MEC 235—Hydraulics and Pneumatics 3 3 4

The basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits and motors, controls, electro-hydraulic servomechanisms, plumbing, filtration, accumulators and reservoirs.

Prerequisite: PHY 102.

MEC 1101—Machine Shop Theory and Practice 3 12 7

An introduction to the machinist trade and the potential it holds for a craftsman. Deals primarily with the identification, care, and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes of lathe, drill press, grinding (off-hand) and milling machines will be introduced both in theory and practice. Basic safety and job planning will be stressed in all machine shop courses.

MEC 1102—Machine Shop Theory and Practice 3 12 7

Advanced operations in layout tools and procedures, power sawing, drill press, surface grinder, milling machine shaper. The student will select projects encompassing all the operations, tools, and procedures thus far used and those to be stressed throughout the course.

Prerequirite: MEC 1101.

MEC 1103—Machine Shop Theory and Practice 3 12 7

Advanced work on the engine, lathe, turning, boring. and threading machines, grinders, milling machines and shapers. Introduction to basic indexing and terminology. The trainee will use precision tools and measuring instruments such as vernier height gauges, protractors comparators, etc.

Prerequisite: MEC 1102.

MEC 1104—Machine Shop Theory and Practice 3 12

Development of class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly and inspection. Additional processes on the lathe, surface grinder, advanced milling machine operations, etc. Special procedures and operations processes and equipment, observing safety procedures faithfully and establishing good work habits and attitudes acceptable to the industry.

Prerequisite: MEC 1103.

MEC 1112—Machine Shop Processes 1 5 3

To acquaint the student with the procedures of layout work and the correct use of hand and machine tools. Experience in the basic fundamentals of drill press and lathe operations; hand grinding of drill bits and lathe tools; set-up work applied to the trade. For welding students.

MEC 1120—Duct Construction and Maintenance 3 6 5

Study of various duct materials including sheet steel, aluminum, and fiber glass. Safety, sheet metal hand tools, cutting and shaping machines, fasteners and fabrication practices, layout methods, and development of duct systems. The student will service various duct systems and perform on the site repairs including ducts made of fiber glass. A study is made of duct fittings, dampers and regulators, diffusers, heater and air washers, fans, insulation, and ventilating hoods.

Prerequisites: DFT 1116, AHR 1123. Corequisite: AHR 1126.

MEC 1115—Treatment of Ferrous Metals 2 3 3

An introduction to the properties of ferrous metals and test to determine their uses. A background in the chemical aspects of metallurgy will be developed for a better understanding of the physical changes and causes of the changes in metals. The main topics of study will include iron and steel production, theory of alloys, shaping and forming, heat treatments for steels and alloys.

Prerequisite: PHY 1102.

MEC 1116—Treatment of Non-Ferrous Metals 2 3 3

Continuation of the study of physical metallurgy. Among nonferrous metals to be studied will be Bearing Metals (Brass, Bronze, Lead), Light Metals (Aluminum and Magnesium) and Copper and its alloys.

MUSIC

MUS 101—Introduction to Music 3 0 3

A non-technical course in music appreciation. Musical elements such as rhythm, harmony, tone, color, and form are analyzed and discussed. Musical masterworks are employed to develop an understanding of the role of music in contemporary culture.

MUS 102—History of Music 3 0 3

The growth of music from its beginning to the Modern Era. Represenetative works of various composers and periods are presented for analysis and discussion.

MUS 103, 104, 105—College Chorus 0 2 1

A study of vocal techniques and choral interpretation. Ensemble singing including the performance of works from standard choral repertory. Voice range audition is required of all students. Attendance at rehearsals and performance is expected. The course is open to all students. Meets two hours per week for one credit

MUS 110—Class Piano 1 0 1

A course in piano technique designed to teach students the beginning skills of piano playing. A study of the easier theory of music will be included, such as scales and chords.

MUS 203, 204, 205—College Chorus 0 2 1

A continuation of MUS 103, 104, 105.

NURSING

NUR 101—Nursing I (Introduction to Nursing) 4 6 6

Nursing I is an introduction to nursing with specific emphasis placed upon the functions of the technical nurse's role in meeting the needs common to all patients. Students have opportunities to acquire basic knowledges, skills, and attitudes necessary for mental health, nutrition, principles of safety, comfort and body mechanics.

Prerequisite: Admission to the nursing program.

Corequisite: BIO 101.

NUR 102—Nursing II (Children and Adults) 5 10 8

Nursing II introduces the student to pharmacology as she begins to study some of the major health problems and patients' adjustments to illness. Opportunities are provided for the student to observe normal growth and development from infancy to old age and to integrate biological and phychological concepts into the practice of nursing.

Prerequisite: NUR 101 and BIO 101.

Corequisite: BIO 102.

NUR 103—Nursing III (Mothers and Infants) 5 10 8

Health needs and practices especially related to the family in promoting and maintaining positive physical and mental health are studied along with the continuation of normal growth and development. Opportunities are provided for the student to achieve knowledge of the progressive changes which occur in a woman and her developing child during the maternity cycle; to understand these changes in relationship to the family; and to apply sound nursing principles to family center care.

Prerequisite: NUR 102 and BIO 105.

NUR 104—Nursing IV (Behavorial Disorders) 5 12 9

Nursing IV is a study of the behavior of mentally ill patients designed to further develop the student's understanding of patients' reactions to illness. Opportunities are provided for students to develop nursing skills through inter-relationships with patients who have behavioral disorders and to examine mental illness as a community health problem.

Prerequisite: NUR 103.

NUR 205—Nursing V (Physical/Mental Illness 5 12 9

Realistic patient problems are presented to give the student practical experience in problem solving. Diseases are studied as they relate to and cause problems for patients of all ages. All major problem-solving areas are introduced in NUR 205 and will continue through NUR 206-207. The student is guided to accept the responsibility for giving skilled nursing care and for solving problems in her own way for individual patients. This care is planned around the patients' needs, his age and his behavior, the medical treatment ordered, and nursing principles.

Prerequisite: NUR 104.

NUR 206—Nursing VI (Children and Adolescents 5 15 10

Students are given the opportunity to increase their nursing skills by applying to the care of children and adolescents principles of: growth and development, observations. communications, nutrition and fluids, pharmacology, body mechanics and asepsis. The child's adjustment to illness, diseases and surgical interventions most commonly occurring during childhood are included.

Prerequisite: NUR 205.

NUR 207—Nursing VII (Mental/Physical Illness and Team Leadership) 5 15 10

More complex patients care situations are presented for the student to apply knowledge and skills to independent problem-solving as she plans the development of leadership skills.

Prerequisite: NUR 206.

NUR 208—Nursing Trends 2 0 2

In preparing for employment, the student studies current problems in nursing responsibilities to the physician, her employer, her co-workers and to herself as a practioner who exemplifies nursing. Nursing organizations and employment opportunities are also presented.

PHILOSOPHY

PHI 201, 202—Introduction to Philosophy I, II 3 0 3

A study of fundamental problems of philosophy, emphasizing the importance of philosophical thinking for man's everyday experience: and examination of typical ideas and systems of ideas throughout history.

PHYSICAL EDUCATION

MEN				
PED 101	Soccer and Touch Football	0	2	1
PED 102	Stunts, Tumbling and Wrestling	0	2	1
PED 103	Softball and Golf	0	2	1
WOMEN				
PED 101	Soccer and Speedball	0	2	1
PED 102	Stunts. Tumbling and Bowling	0	2	1
PED 103	Softball, Archery and Badminton	0	2	1
MEN				
PED 201	Badminton and Volleyball	0	2	1
PED 202	Table Tennis, Shuffleboard and Bowling	0	2	1
PED 203	Basic Tennis and Archery	0	2	1
WOMEN				
PED 201	Golf and Volleyball	0	2	1
PED 202	Gymnastics. Table Tennis and Shuffleboard	0	2	1
PED 203	Tennis	0	2	1
MEN & WOMEN				
PED 104	Basic Swimming	0	2	1
PED 204	Advanced Tennis	0	2	1
PED 205	Personal Health and Community Hygiene	3	0	3

The study of personal and community health and hygiene as it relates to the individual in society.

PHYSICAL SCIENCE

PHS 101—Physics Survey 2 2 3

The beginning course of physical science includes a study of physics. Some of the topics of discussion are measurements, forces, gravity, mechanics. heat, light, sound, electricity, and atomic properties.

PHS 102—Chemistry Survey 2 2 3

Included in this course are general discussions of the basic concepts of chemistry and the properties of elements. Topics of discussion include the following: chemical processes, water, ionization, nitrogen, the halogen, sulfur, carbon and silicon. and organic and food chemistry.

PHS 103—Meterology-Geology-Astronomy 2 2 3

Topics for consideration are atmosphere, weather. erosion, rocks earth's past, the solar system, the Milky Way, and extragalactic systems.....

PHYSICS

PHY 101—Mechanics 3 2 4
An introductory course in physics designed for the technically oriented student covering measurement both in English or metric systems, vectors, linear motion, Newton's laws, energy, and rotational motion.

PHY 102—Properties of Matter and Heat 3 2 4
This course includes the study of gas, solids, and liquids under varied conditions. Heat and thermodynamic investigations are discussed. The course closes with an investigation into the history and basic properties of nuclear and atomic physics.

PHY 103—Electricity 3 2 4
Electrostatics, magnetism and current electricity are the subjects covered in this course. Topics such as meters, induction, transformers, Ohm's laws and Kirchoff's laws are discussed in detail.

PHY 104—Light and Sound 3 2 4
Light and sound are the two areas which constitute this course. Concepts of interference. Doppler effect, particle and wave theories of light, and spectra classification are some of the main topics discussed.

PHY 106—Applied Mechanics 5 0 5
Concepts and principles of statics and dynamics. Parallel Concurrent and noncurrent force systems in coplaner and noncoplaner situation. Concepts of centroids and center of gravity, moments of inertia, fundamentals of Kinetics, and kinematics of velocity and motion.
Prerequisites: MAT 103, PHY 102.

PHY 110—Physics for Health Occupations 2 2 3
A survey course with particular attention given to the application of classical physical principles to physiologic processes, therapeutic procedures, and various apparatis found in health services.

PHY 201—General Physics I 3 2 4
This course designed primarily for physics and engineering (and echnology) majors includes in the first quarter of study the following machines and vector analysis, particle and rigid body mechanics, tatics, rotary motion, Newton's laws. and conservation laws.

PHY 202—General Physics II 3 2 4
Second quarter of general physics includes the study of heat, ound, light. wave motions. and optics.
Prerequisite: PHY 201.

HY 203—General Physics III 3 2 4
Final quarter of general physics includes the study of electricity, agnetism, atomic and nuclear physics.
Prerequisite: PHY 202.

HY 1101—Applied Science 3 2 4
An introduction to physical principles and their application in dustry. Topics in this course include measurement; properties of lids, liquids, and gases; basic electrical principles.

PHY 1102—Applied Science 3 2 4
The second in a series of two courses of applied physical principles. Topics introduced in this course are heat and thermometry and principles of force, motion. work, energy, and power.
Prerequisite: PHY 1101.

POLITICAL SCIENCE

POL 201—American National Government 3 0
A study of the formation and development of the national government, its organization, functions and powers.

POL 202—American State and Local Government 3 0
A study of the organization, functions, and powers of state and local government in the United States.

PLUMBING

PLU 1101—Plumbing and Fundamentals 3 12
Topics of study will include modern plumbing techniques, procedures, fixtures, and machinery.

PSYCHOLOGY

PSY 101. 102—General Psychology I, II 3 0
An introductory survey of psychology. Topics include pre- and post-natal development, the structure and functions of the nervous systems and glands, sensory organs and processes, intelligence, aptitudes and abilities, perception, motivation, learning. emotion, personality, and adjustment.

PSY 103—Human Potential Seminars 2 0
Through a small group process and readings in the field of self actualization psychology, the purpose of this course is to help persons discover and actualize their capabilities and strengths.

PSY 104—The Psychology of Personal Adjustment 3 0
Through a study of ego and personality development—utilize the latest psychological theories—to understand the development of the self-concept, patterns of interpersonal relations, handling stress and pressures and effective life adjustment.
Prerequisite: Either Psycholgy 101, 102, or Human Potential Seminar 103.

PSY 110—Human Relations in Management 3 0 3
A behaviorial science approach to business. Management problems related to motivation, communication, organization, balance and change; recognition and analysis of problems in human interaction.

PSY 201, 202—Human Development I, II 3 0 0
Development of the normal child and adolescent, with consideration of the social, biological and cultural influences upon growth. Two quarters.
Prerequisite: PSY 101. 102.

PSY 1101—Human Relations 3 0 3
A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

RELIGION

REL 101—Introduction to Old Testament 3 0 3
A survey of the Old Testament designed to introduce the student to the history, literature and religion of the ancient Hebrews.

REL 102—Introduction to New Testament 3 0 3
An examination of the New Testament intended to introduce the student to the Jewish background, the historical setting, the purpose, and the major ideas of this literature. Special emphasis will be given to the significance of the ministry of Jesus and the Apostle Paul.

REL 205—Comparative Religion 3 0 3
A comparative study of the major religions of the world, both ancient and modern. An analysis of major religious concepts with attention given to the effects of contemporary history.

SAFETY

SAF 1101—Safety and First Aid (Vocational) 2 0 2
Principles and practices as applied to emergency first aid, study of safety procedures and techniques as related to vocational training with the teaching emphasis placed on accident prevention.

SOCIOLOGY

SOC 201—Introduction to Sociology 3 0 3
A study of the fundamental principles and concepts of sociology, with emphasis on contemporary American institutions in relation to technological change, ethnic groups, populations trends and social control.

SOC 202—Marriage and the Family 3 0 3
A study of the family as a social institution—its origins and development, its forms and functions, its interrelation with other social institutions, and its role in contemporary civilization. In connection therewith, a study is made of sex development, differentiations, social relationships between the sexes, and factors contributing to or mitigating against successful, stable marriages.

SPANISH

SPA 101, 102, 103—Elementary Spanish I, II, III 2 3 3

An introduction to spanish, with a modern, audio-lingual approach. Up-to-date materials and methods are used. Emphasis first on hearing and speaking, then on reading and writing. Lab work is required as part of the course for those with no previous Spanish or those who do not make satisfactory score on Spanish placement tests. Three quarters.

SPA 151, 152, 153—Intermediate Spanish I, II, II 2 3 3

A review of the skills of hearing, speaking, reading and writing. Audio-lingual work in class and in lab. Selected supplementary readings. Three quarters.

Prerequisites: Two units of high school Spanish and a satisfactory placement test score, or SPA 101 SPA 102, and 103.

SPA 201, 202, 203—Survey of Spanish

SPA 201. 202, 203—Spanish Civilization I, II, III 3 0 3

A study of Spanish culture and civilization. Selected readings in the literature of Spain and Spanish America from the Middle Ages to the present. Parallel reading and reports. Three quarters.

Prerequisite: Permission of instructor.

SPEECH

SPH 101—Speech I 3 0 3

This course involves the study and application of the fundamentals of extemporaneous speaking. Consideration of the mechanics of speech is involved with emphasis on oral reading as a means of improving voice and articulation.

SPH 102—Speech II 3 0 3

A study of oral interpretation of literature including the ballad lyric and narrative poetry; the article and short story; dramatic reading; and an introduction to the principles of argumentation and debate.

SPH 103—Speech III 3, 0

A study of representative, modern, and contemporary, one-act plays. Wide reading in the genre will be required. Study will be reinforced by at least one play production.

WELDING

WLD 1101—Basic Gas Welding 0 3 1

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding, bronze welding, silver-soldering, and flame-cutting methods applicable to mechanical repair work.

WLD 1112—Mechanical Testing and Inspection 1 3 2

The standard methods for mechanical testing of welds. The student is introduced to the various types of tests and testing procedures and performs the details of the test which will give adequate information as to the quality of the weld. Types of tests to be covered are: bend, destructive, free-bend, guide-bend, nick-tear notched bend, tee-bend, nondestructive, V-notch, Charpy impact, etc.

Prerequisites: WLD 1120. WLD 1121.

WLD 1120—Oxyacetylene Welding and Cutting 3 12 7

Introduction to the history of oxyacetylene welding. the principles of welding and cutting. nomenclature of the equipment, assembly of units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead position, brazing, hard and soft soldering. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. Students perform mechanical testing and inspection to determine quality of the welds.

WLD 1102—Basic Arc Welding 0 3 1

Introduction to basic arc welding. Demonstrations by the instructor and basic welding practice by students. Safety practices will be stressed throughout the course.

WLD 1121—Arc Welding 3 12 7

The operation of AC transformers and DC motor generator arc welding sets. Studies are made of welding heats, polarities. and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weaknesses in welding. Safety procedures are emphasized throughout the course in the use of tools and equipment.

WLD 1122—Commercial and Industrial Practices 3 9 6

Designed to build skills through practices in simulated industrial processes and techniques: sketching and laying out on paper the size and shape description, listing the procedure steps necessary to build the product, and then actually following these directions to build the product. Emphasis is placed on maintenance, repairing worn or broken parts by special welding applications, field welding and nondestructive test and inspection.

Prerequisites: WLD 1120, WLD 1121.

WLD 1123—Inert Gas Welding 1 3 2

Introduction and practical operations in the use of inert-gas-shield arc welding. A study will be made of the equipment, operation, safety and practice in the various positions. A thorough study of such topics as: principles of operation, shielding gases, filler rods. process variations and applications, manual and automatic welding.

Prerequisites: WLD 1120, WLD 1121.

WLD 1124—Pipe Welding 3 12 7

Designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code.

Prerequisite: WLD 1121.

WLD 1125—Certification Practices 3 6 5

This course involves practice in welding the various materials to meet certification standards. The student uses various tests including the guided bend and the tensile strength tests to check the quality of his work. Emphasis is placed on attaining skill in producing quality welds.

Prerequisites: WLD 1120, WLD 1121, WLD 1123. WLD 1124.

CONTINUING EDUCATION

Surry Community College is committed to the continuing education of all the citizens in its area of service. To fulfill this commitment, the college offers a variety of courses, institutes, conferences, clinics, forums, demonstrations. workshops and exhibits designed to meet adult educational needs and interests.

Through the Continuing Education Division, students find opportunities to retrain and update themselves in employment, develop leadership and civic responsibility, expand knowledge in general education, and develop creativity in the fine arts.

The Adult Education courses are offered when there is community need and interest. Some courses and services, because of great demand. are offered on a regular, continuing basis. Other courses and services may be initiated by requests from individuals and groups. Surry Community College cooperates with schools, libraries, colleges, health and welfare groups, civic clubs, community clubs, law enforcement agencies, fire service groups, and business and industrial groups to provide educational service for greater numbers of people.

GENERAL INFORMATION

CLASS LOCATIONS

Many continuing courses and services are provided on the college campus at Dobson. Other courses and services are provided in extension centers in the various communities of Surry and Yadkin Counties. New classes may be formed whenever a sufficient number of persons show interest in a particular area of study.

ADMISSION AND REGISTRATION

Any person eighteen years of age or older may be admitted to a continuing education class. In extenuating circumstances and upon the approval of the appropriate public school official, a person under eighteen years of age may be admitted.

Prior to the beginning of each quarter, a course schedule is made available to potential students.

Courses which begin between quarters are announced through local news media. Adults are encouraged to contact the college and pre-register prior to the beginning of each course. However, adults may register at the first class session if unable to register.

FEES

Fees vary with the type of educational program provided. Some programs such as adult basic education are supported primarily from state and federal funds and are free of student cost. Other programs such as business education are partially self-supporting through student fees. When such fees are necessary, they are announced in the course schedule and are paid at the first class session. Books and supplies are usually the responsibility of the student and may be purchased from the college bookstore.

CONTINUING EDUCATION DIVISION

ATTENDANCE

Regular attendance and class participation are essential to effective teaching and learning. Adult students are expected to be regular and punctual in attendance. A minimum of 75 per cent student attendance is required to receive a certificate of completion.

Certificates: Continuing Education Programs are designed primarily for personal growth and development; therefore, no degree credit is awarded. North Carolina High School Completion Certificates are awarded to students who complete successfully the Adult High School Program. For the successful completion of most other adult education programs, the student is awarded an Achievement Certificate.

PROGRAMS

Continuing Education Programs are offered in major program areas and through the Programmed Instructional Learning Laboratory. The major program areas are:

Adult High School, Public Service, Professional In-service, Family Life, Cultural Enrichment, Business and Industrial Services and Community Services. The Programmed Instructional Laboratory makes an important contribution to each adult education program and to many other programs offered by Surry Community College.

DEVELOPMENTAL STUDIES

Adult Basic Education (grades 1-8)

Adult High School

Public Service Programs

Law Enforcement Training
Fire Service Training
Leadership Training
Citizenship Development

Professional In-service Programs

Library Administration
Nurse Improvement
Teacher Renewal

Family Life

Knitting
Creative Arts
Sewing
Furniture Refinishing
Personal Care

Cultural Enrichment

Driver Education
Oil Painting
Music Education

Business and Industrial Services

Air Conditioning
Brick Masonry
New Industry Training
Carpentry
Food Service
Small Engine Repair
Custodial Training
Blueprint Reading
Manpower Development Training
Sewing Machine Mechanics

Welding
Supervisory Development Training

Community Service

Seminars
Conferences
Speakers
Musical Programs

Individual instruction and personal achievement are emphasized in each of the instructional areas. Courses are available in each of the areas through programmed instruction. The objective is to help adults progress from their present educational level through a functional level of twelfth grade.

Level One:	Non-readers through grade four; basic reading, writing and arithmetic.
Level Two:	Grade five through grade eight; reading improvement, English expression, arithmetic, geography, and social studies.
Level Three:	Grade nine through grade twelve, reading improvement, English expression, mathematics, science, social studies.

PROGRAMMED INSTRUCTION LEARNING LABORATORY

The Programmed Instruction Learning Laboratory provides an opportunity for any interested adult, whether he has completed high school, college, or not, to study any of over two hundred programmed instruction courses ranging in difficulty from the elementary school level to the college level. Each of these courses is presented in a book, which reduces the course content into simple, step-by-step units. Individuals studying most of these courses are completely free to set their own study pace. Students who are advised to complete phases of programs leading to a high school diploma, or are required to do remedial study in association with a college course of study, are expected to show steady progress toward a pre-determined objective of learning laboratory study. There are no teacher-administered tests, grade assignments, or set speeds of completion for most programmed instruction courses.

Many courses are included in each of the following areas; Business and industry, English, Foreign Language, Leisure Activities, Health and Safety, Mathematics, Psychology, Reading, Science and Technology, Social Sciences.

No fee is charged for this program.

Any person interested in the Programmed Instructional Learning Laboratory should contact the Learning Laboratory Coordinator, Surry Community College, Dobson, North Carolina.

GENERAL EDUCATIONAL DEVELOPMENT TEST

Individuals who wish to receive the Certificate of High School Equivalency may apply to take the General Educational Development Test at the college. A schedule of test dates will be made available to interested persons on request.

A total score of 225 or more with no single test below a standard score of 35 is considered passing and qualifies the applicant to receive the certificate issued by the State Department of Public Instruction.

Any person who is not a high school graduate may apply for the certificate and take the GED test if: (1) he is nineteen (19) years of age or older; (2) he is a resident of the state; and (3) he has a definite vocational or educational purpose.

LAW ENFORCEMENT TRAINING

Law Enforcement Training is provided at the request of law enforcement agencies or individuals. Courses are especially designed as in-service and pre-service education for those engaged in law enforcement activities. Workshops and courses are offered in many areas such as the following: Courts and Laws, Elements of Offenses, Motor Vehicle Law, Criminal Investigation, Report Writing, Juveniles, Applied Psychology, Human Relations, Instructor Training. Firearms, Photography.

FIRE SERVICE TRAINING

Fire Service Training is designed to provide firemen the opportunity to gain technical information and skill in modern fire fighting. The classes are taken directly to the firemen through training sessions held in local departments and training fields in the community. Among the courses offered are the following: Introduction to Fire Fighting, Portable Fire Extinguishers, Fire Fighting Procedures, Arson Detection. Rope, Ladder, Hose, Rescue Practices, Forcible Entry, Protective Breathing Equipment, Ventilation.

LEADERSHIP TRAINING

The increasing complexity of American society demands that greater attention be given to leadership training. Leadership oriented courses are provided for civic, religious, professional, social, and other groups desiring leadership training. Courses provided are: Public Speaking, Parliamentary Procedure, Program Planning, Conferences That Work, Discussion Leadership, Committee Organization.

CITIZENSHIP DEVELOPMENT

The development of creative citizenship responsive to community potential and active supervisors who want to prepare for more effec citizenship education contribute to such development. Courses ar available in these subject areas: American History, World History, In ternational Affairs, North Carolina History, State Government, Socia Problems, City and County Government.

MANAGEMENT DEVELOPMENT PROGRAM

Management Development Program Courses are designed for potential and active supervisors who want to prepart for more effective leadership and advancement. Courses are offered at the college campus or in industrial plants. The courses are flexible in terms of content and meeting times. Every effort is made to fit course content to particular industrial or business needs. Emphasis is placed on training individuals in supervisory skills which help reduce worker training time, improve worker safety records, reduce labor turnover, improve product quality, upgrade production records, and improve an industry's image. Courses are available in the following subject areas: Principles of Supervision (Seven Parts), Human Relations I and II, Art of Motivating People. Economics in Business and Industry, Effective Communications, Effective Writing, Effective Speaking, Reading Improvement, Work Measurement, Job Methods, Conference Leadership, Job Instruction Training, Creative Thinking, Industrial Safety and Accident Prevention. Industrial First Aid, The Supervisor in North Carolina, The Supervisor and Employee Benefits, Job Analysis Training, Cost Accounting for Supervisors, Supervision in Hospitals.

BUSINESS MANAGEMENT

Business Management Courses are planned for individuals employed in wholesale and retail occupations. Emphasis is placed on improving customer and job relations, making the best use of advertising, improving individual personality and salesmanship, developing oral communications, and training individuals to function more effectively in their respective occupations. Courses and workshops are offered in these subject areas: Job Relations in Business, Customer Relations, Personality Development, Creative Salesmanship, Advertising, Marketing Research.

VOCATIONAL IN-SERVICE EDUCATION

Non-curricuulum short courses are planned especially for adults who desire to update themselves in skilled and technical areas. Areas in which courses may be planned: Welding, Electricity, Carpentry, Agricultural Technology, Masonry, Automotive Mechanics, Electronics, Surveying.

COMMUNITY SERVICE PROGRAMS

Surry Community College will sponsor and promote a number of Community Services which contribute to the cultural, economic, and civic improvement of the community. Such services may arise from almost every program area. Community Service activities include the following: Seminars, Conferences, Forum Series, Speakers, Discussion Groups, Lecture and Film Series. Fine Arts Exhibits, Musical Programs. Community Studies, Drama Programs.

FACULTY

ATKINS, BROADUS D. ..... Automotive Mechanics
A.A.S.—Central Utah Vocational School

AYERS, CLAUDE V. ..... Dean of Continuing Education
B.S., M.A.—Appalachian State University

BARFIELD, JENNINGS P. ..... Business
B.S.—Pembroke State University
M.S.—Virginia Polytechnic Institute

BILLINGS, JUANITA O. ..... Nursing
B.S.—Lenoir Rhyne

BLACKBURN, MAX A. ..... ABE Coordinator
B.S.—Appalachian State University

BRENDLE, KENT F. ..... Continuing Education Coordinator for
A.B.—High Point College ..... Yadkin County

BRYANT, FRANCES D. ..... Nursing
R.N.—N. C. Baptist Hospital School of Nursing
Guilford College

COLLINS, JOHN K. ..... Chairman of Technical-Vocational Division
B.S.—Western Carolina University
M.Ed.—North Carolina State University

COX, ABBE ROSE ..... Art
B.S., M.A.—Columbia University

DICKENSON, PAMELA R. ..... English
B.S., M.S.—Radford College

DOOLEY, DORIS ..... Learning Lab
A.B.—John Wesley College

ERVIN, STEVE H. ..... Agricultural Business
B.S.—North Carolina State University
M.Ed.—North Carolina State University

FINK, JAMES R. ..... Sociology
A.B.—Stetson University
B.S., Th.M.—Southeast Baptist Theological Seminary

FREED, R. ERIC ..... Drafting and Design
A.A.S.—Forsyth Technical Institute

FREEMAN, RAYMOND C. ..... Director of Learning Resources
B.S.—University of North Carolina
M.A.—Appalachian State University

GORRIARAN, DR. ADOLPHO ..... Spanish
Bachelor in Letters—Institute del Vedado
Doctor of Law—University of Havana, Cuba

HESTER, CHARLES ..... Physics
B.S.—Florence State University
M.S.—University of Alabama

HILDRETH, CAROL ..... Nursing
B.S. in Nursing—University of North Carolina at Charlotte

HINSHAW, LETTY ..... Physical Education
B.S., M.A.—Appalachian State University

HINSHAW, PAUL ..... Physical Education
B.S., M.A.—Appalachian State University

HOLCOMB, CONRAD C., JR. ..... Chairman Social Studies Division
A.B.—University of North Carolina
M.A.—George Washington University

HOLLAR, THURMAN D. ..... English
B.S., M.A.—Appalachian State University

HUTCHENS, JAMES A. ..... History
A.B., M.A.—University of North Carolina

JOHNSON, H. CLYDE ..... Dean of Administrative Services
A.B.—Elon College
M.A.T.—University of North Carolina

JONES, GEORGE W. ..... Carpentry

KIMMONS, LEROY ..... Psychology
A.B.—Wheaton College
M.A.—Wake Forest University

LAMBE, ANNEAL L. ..... Learning Lab Coordinator
Th.B.—John Wesley College

LEAR, C. MERRITT ..... Electronics
B.S., M.S.—University of North Carolina

McCACHREN, WILLIAM ..... Mathematics
A.B.—Catawba College
M.Ed.—University of Chattanooga
M.S.—East Tennessee State

McCANN, GUY ..... Chairman Mathematics Division
B.S.. M.A.—Appalachian State University

McCOLL, ELLA D. ..... Chairman Nursing Division
B.S.—Duke University
M.S.—University of Maryland

MADISON, CHARLES ..... Continuing Education
B.S.—East Carolina University

MARETTE, MICHEL ..... Business
M.A.—University of Brussels
M.Ed.—University of Georgia

MARTIN, JIMMY H. ..... Music
B.S.—High Point College
B.R.B.—Southwestern Baptist Theological Seminary

MAYE, JOSEPH B. ..... Psychology
B.A.—Lenoir Rhyne College—B.D.—Duke University
M.S.—Radford College

MOTSINGER, C. WAYNE ..... Counselor
A.B.—Guilford College
M.A.—Appalachian State University

NICHOLS, TANIS M. ..... Business
B.S.—Western Carolina University

PAGE, CAROLYN F. ..... Business
B.S.—Winston-Salem State University
M.Ed.—University of Greensboro

REECE, WELDON E. ..... Learning Lab Coordinator
B.S.—Guilford College

REEVES, JAMES M. ..... Dean of Student Personnel
B.S.. M.A.—Appalachian State University

REYNOLDS, WILLIAM C. ..... Auto Mechanics
Wilkes Community College

RICHARDS, DR. SWANSON ..... President
B.S., M.A.—Appalachian State University
Ed. D.—Florida State University

RIPLEY, DELIA M. ..... Nursing
B.S.—University of North Carolina School of Nursing

SANDERS, WILLIAM ..... History
B.A.—Millsaps College
M.A.—University of North Carolina

SELBY, T. NORWOOD ..... English
B.A., M.A.T.—University of North Carolina

SELTZER, RICHARD C. ..... Biology
A.A.S.—Agriculture and Technical Institute at Alfred
B.S.—University of Georgia—M.S.—Ohio University

SHEPARD, STEVE ..... Machine Shop
A.A.—Surry Community College
Vocational Diploma—Forsyth Technical Institute

SHEPHERD, CARLYLE M. ..... Counselor
B.S., M.A.—Appalachian State University

SHEPHERD, MARGARET F. ..... English
B.S.. M.A.—Appalachian State University

SIMMONS, FRANKLIN D. ..... Construction

SPARGER, GOLDIE S. ..... Business
B.S.—Steed College
M.A.—Appalachian State University

STOCKTON, GEORGE E. ..... Academic Dean
B.S.—Trenton State College
M.Ed.—Temple University

SURRATT, CARLOS P. ..... Dean of Evening Programs
A.B.—University of North Carolina
M.A.—Appalachian State University

TEMPLETON, JAMES H. ..... Dean of the College
B.S., M.A.—Appalachian State University

THOMAS, ROY M. ..... Welding
Certificates—Department of the Navy Service Schools

THOMPSON, RUTH ..... Registrar; Counselor
B.S., M.S.—University of North Carolina

TUCKER, ANGUS J. ..... Auto Mechanics

VanHORN, JOHN M. ..... English
B.S., M.A.—Appalachian State University

WALLACE, JAMES H. ..... Business
B.S.—North Carolina State University
M.B.A.—Harvard University

WENGER, DR. RAYMOND ..... Chemistry
B.S., M.S.—Penn, State University—Ph.D.—Purdue University

WILES, DR. EDWIN ..... Biology
A.B.—Guilford College
M.A., Ph.D.—Wake Forest University

WILLIAMS, LARRY C. ..... Religion
B.A.—Wake Forest
B.D., ThM.—Southeastern Baptist Seminary

WILSON, ELIZABETH W. ..... Librarian
B.A.—Agnes Scott College
M.Libr.—Emory University

OFFICE AND GENERAL STAFF

Betty F. Hemmings ..... Bookkeeper
Betty I. Chilton ..... Library Clerk
Pauline W. Eads ..... Library Clerk
Jean S. Badgett ..... Secretary
Anita L. Bullin ..... Secretary
Janie O. Garris ..... Secretary
Madge G. Gunnell ..... Secretary
Parnell Hobson ..... Secretary
Susan S. Johnson ..... Secretary
Keith Marion ..... Business Office
Betty H. Newman ..... Secretary
Judy Reece ..... Secretary
Judy S. Stephens ..... Secretary
Barbara J. Wall ..... Secretary
Flossie S. Bryant ..... Bookstore Manager
Leona Cook ..... Snackbar Manager
Charles Gentry ..... Maintenance Department
Ernest Gwyn ..... Night Watchman
Graham S. Lawrence ..... Maintenance Superintendent
Beulah Marion ..... Snackbar
Claude Marion ..... Maintenance Department
Warren Mitchell ..... Maintenance Department
Viola H. Nixon ..... Snackbar
Shirley M. Payne ..... Snackbar

CORRESPONDENCE DIRECTORY

For further information, inquiries in specific areas should be addressed to the office indicated at Surry Community College, Dobson, N. C. 27017.

Administrative Matters and Public Relations	**President**
Business Matters	**Dean of Administrative Services**
Admissions. Catalogs	**Dean of Student Personnel**
Records, Transcripts	**Registrar**
Academic Information	**Academic Dean**
Placement	**Dean of Student Personnel**
Financial Aid	**Director of Financial Aid**
Evening Classes	**Dean of Evening Programs**
High School Completion	**Dean of Continuing Education**
Extension Classes	**Dean of Continuing Education**

TELEPHONE

Area Code 919

386-8121

Dobson, N. C.

OFFICE HOURS

8:30 A.M. — 9:30 P.M., Monday through Thursday

8:30 A.M. — 5:00 P.M., Friday

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JANUARY

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JULY

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1974 Calendar 1974

JANUARY

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FEBRUARY

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MARCH

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Surry Community College

'74-'75

CORRESPONDENCE DIRECTORY

Inquiries about specific areas should be directed to the person listed.

Academic Information ..... George E. Stockton
Dean of Instruction

Administrative Matters ..... Dr. Swanson Richards
President

Admissions, Catalogs, Records
and Transcripts ..... James M. Reeves
Dean of Student Personnel

Business Matters ..... H. Clyde Johnson
Dean of Administrative Services

Evening Classes ..... Carlos P. Surratt
Dean of Evening Programs

Extension Classes ..... Claude V. Ayers
Dean of Continuing Education

Financial Aid ..... C. Wayne Motsinger
Financial Aid Director

High School Completion ..... Claude V. Ayers
Dean of Continuing Education

Placement ..... John K. Collins
Placement Director

Public Relations ..... Dr. Swanson Richards
President

Veterans Information ..... Byron Lawson
Veterans Affairs Coordinator

SURRY COMMUNITY COLLEGE
1974-1975 CATALOG

Established by authority of the 1963 General Assembly
Under Chapter 115A,
General Statutes of North Carolina

* * * * * *

Accredited by
The Southern Association of Colleges and Schools
and
The North Carolina State Board of Education

SURRY COMMUNITY COLLEGE
P. O. Box 304
Dobson, N. C. 27017
Telephone (919) 386-8121

Surry Community College Bulletin Vol. VI, No. 1

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COLLEGE CALENDAR, 1974-75

FALL QUARTER, 1974-75

September 3, Tuesday ..... Registration
September 4, Wednesday ..... Faculty Orientation
September 5, Thursday ..... Classes Begin
September 12, Thursday ..... Last Day to Add Classes
October 4, Friday ..... Last Day to Drop Classes Without Course Appearing on Record
November 20, Wednesday ..... Reading Day
November 21, Thursday to Nov. 25, Mon. .... End-of-Quarter Evaluation

WINTER QUARTER, 1974-75

November 26, Tuesday ..... Registration
November 28 and 29, Thursday and Friday ..... Thanksgiving Holiday
December 2, Monday ..... Classes Begin
December 9, Monday ..... Last Day to Add Classes
December 23, Monday ..... Christmas Holiday Begins
January 2, Thursday ..... Classes Resume
January 10, Friday ..... Last Day to Drop Classes Without Course Appearing on Record
February 28, Friday ..... Reading Day
March 3, Monday to March 5, Wed. ..... End-of-Quarter Evaluation

SPRING QUARTER, 1974-75

March 6, Thursday ..... Registration
March 10, Monday ..... Classes Begin
March 17, Monday ..... Last Day to Add Classes
March 31, Monday ..... Spring Vacation Begins
April 7, Monday ..... Classes Resume
April 11, Friday ..... Last Day to Drop Classes Without Course Appearing on Record
May 26, Monday ..... Reading Day
May 27, Tuesday to May 29, Thursday ..... End-of-Quarter Evaluation
May 30, Friday ..... Graduation

SUMMER QUARTER, 1975-76

June 9, Monday ..... Registration for Full and First Summer Sessions
June 10, Tuesday, ... First Full Summer Session Classes Begin
July 4, Friday ..... Holiday
July 15, Tuesday ..... End of First Session
July 16, Wednesday ..... Registration for Second Session
July 17, Thursday ..... Second Session Classes Begin
August 22, Friday ..... End of Full and Second Summer Sessions Summer Graduation

STATEMENT OF PURPOSE

Surry Community College exists in the belief that each person should have the opportunity to reach his full potential within society. The college strives to provide, through quality instruction, guidance, counseling, and testing services, the skills and knowledge necessary for the development of the total individual.

Surry Community College, a two-year comprehensive institution established under the provision of Chapter 115A of the General Statutes, assumes its responsibility to:

— provide, through the open-door admissions policy, expanded and relatively inexpensive educational opportunities for young people and adults who would not otherwise continue their education.

— provide students who plan to transfer to other institutions with two years of quality college credit courses.

— provide technical programs appropriate to the needs of the individual in industry, agriculture, business, and service occupations.

— provide programs, such as automotive, electronics, building, machinist, drafting, and welding, for the development of skills and trades relevant to an individual's vocational needs.

— provide continuing programs for adults who desire to improve their personal efficiency, to enrich their cultural lives, or to develop basic educational skills.

— provide developmental work to minimize educational deficiencies.

— provide extracurricular activities to foster responsible citizenship and cultural enrichment.

HISTORY

Long before the publication of the Carlyle Report, citizens of Surry County became interested in establishing a community college in the area. In 1960 the Mount Airy Lions Club appointed a committee of five members to study the possibilities and to communicate with the Division of Higher Education in Raleigh. In 1962 the committee was expanded to include all major civic groups in the county.

Local newspapers and radio stations endorsed the project and expressed wholehearted approval. By May, 1963, interest in a community college had reached such a point that a county-wide meeting was held in Dobson to discuss procedural steps. Following the meeting, the Surry County Board of Commissioners and the Boards of Education of the Elkin City Schools, the Mount Airy City Schools, and the Surry County Schools endorsed the community college project. Steps were taken to initiate a county-wide study.

The Surry County Board of Commissioners appointed a Community College Steering Committee on August 5, 1963, composed of fourteen members. The committee voted unanimously to authorize a county survey to submit to the county commissioners. The application was approved by local government officials and was submitted to the State Board of Education at its December, 1963, meeting to request a comprehensive community college for Surry County. The application was approved by the State Board on January 9, 1964.

The citizens of Surry County approved a $500,000 bond issue and a four-cent tax authorization in 1964. In September, 1972, another bond issue was authorized by the people in the amount of $1,000,000.

On November 2, 1964, I. John Krepick was elected President of Surry Community College. James H. Templeton served as Interim President from August, 1971, to July, 1972. Dr. Swanson Richards assumed the presidency July 1, 1972.

The college facilities are located in Dobson, North Carolina. Six major structures make up the campus — a science-technical building, shop building, learning resources building, physical education building, classroom building, and vocational-technical building.

Surry Community College is accredited by the Southern Association of Colleges and Schools and by the North Carolina State Board of Education.

The College is a member of the American Association of Junior and Community Colleges, the North Carolina Association of Junior Colleges and Universities, and the Southern Association of Junior Colleges.

GENERAL INFORMATION

ADMISSIONS POLICY

Surry Community College is an "Open Door" institution and is not bound by restrictive admissions policies insofar as admission tests are concerned. It is the feeling of the College staff that secondary school records more accurately predict college success than any other criteria. However, since students will, in some cases, need the Scholastic Aptitude Test (SAT) for transfer, it is suggested that students take this test while in high school.

The College will administer various tests which assist in the placement of students in the most suitable program. A personal interview with an admissions officer will aid the student in determining his specific educational objectives. When scores on tests indicate a lack of readiness to begin college-level work, developmental studies programs are available. The students are advised based on their high school grades and their college placement tests. High school graduation or its equivalent is recommended for all curricula.

Surry Community College provides educational opportunities to both men and women without regard to race, creed, or national origin.

APPLICATION PROCEDURES

Individuals desiring to enter Surry Community College should complete an application form and return it to the Admissions Office, Surry Community College, Dobson, N. C. 27017. Students are urged to submit applications well in advance of the quarter which they have selected for enrollment. No fee should be sent with the application.

Upon receipt of the application by the college, the prospective student will receive detailed instructions regarding admissions procedures.

Beginning students should request their high school to forward a transcript of their work to the College Admissions Office.

Transfer students should request that official transcripts of all work attempted elsewhere be sent directly to Surry Community College.

TRANSFER CREDIT

Students transferring from other colleges must furnish official transcripts of records from all institutions attended. "D's" will be accepted if a student has a two-point (2.0) or "C" average on all work transferred into Surry Community College. Courses satisfactorily completed in other accredited institutions are evaluated in terms of the program selected at Surry Community College. Students must present an official transcript, whether it be from another institution, USAFI, correspondence, or military school, to the Dean of Student Personnel for credit evaluation.

GUIDANCE AND COUNSELING SERVICE

Guidance of the student begins with the admissions interview by an assigned counselor prior to entrance. Immediately after his acceptance, each student will meet with his counselor for an orientation to the entire curriculum of the college. Each student is assigned to a faculty adviser who helps him select his courses in subsequent quarters. Members of the Student Personnel Department, as well as other staff members, are available for students to discuss their personal and classroom problems, as well as their educational plans. The Student Personnel Office will assist students in all matters pertaining to transfer.

Students who need specialized, individual counseling service beyond that provided by faculty advisers may be referred to the Student Personnel Office.

STUDENT CONDUCT

Students should consider at all times that the reputation of the institution depends in no small part upon their behavior. No long list of regulations and penalties should be necessary if each student abides by the rules of common courtesy and cooperation. Specific regulations and official policies are listed in the **Student Handbook.** College officials may dismiss any student who conducts himself in a manner incompatible with the purposes of the College.

ACADEMIC INFORMATION

A student must maintain a Cumulative Quality Point Average of 2.0 or better to be in good academic standing.

Student progress is measured by Quality Point Average, or QPA; the quality of work a student has done at the College through one or more quarters is reflected by his Cumulative Point Average, or CPA.

The Quality Point Average is calculated as follows:

1. Allowing 4 points for an A, 3 points for a B, 2 points for a C, 1 point for a D, and 0 points for an F, multiply the number of points equivalent to the letter grade received in each course by the number of credit hours for the course to arrive at the quality points earned in each course.

2. Divide the sum of the quality points by the total number of credit hours of work; the quotient represents the Quality Point Average for the quarter.

The Cumulative Point Average is determined in the same manner as the Quality Point Average, except that all of the student's work at the College is taken into account.

SYSTEM OF GRADING

The following grading system is used at Surry Community College.

Letter	Description	Quality Points
A	Superior	4
B	Good	3
C	Average	2
D	Passing	1
F	Failing	0
I	Incomplete	0
WP	Withdrew, passing	0
WF	Withdrew, failing	0

INDEPENDENT STUDY

Students wishing to take courses by independent study must contact the instructor of the course prior to registration and fill out the required forms. These forms must be signed by the student, instructor, division head, and Dean of Instruction.

Tuition for a class taken on independent study is the same as the tuition for that same class if taken on a regular basis.

DEAN'S LIST

In order to qualify for the Dean's List, a student must carry at least twelve (12) quarter hours of credit work during the quarter, maintain a 3.0 quality point average for the quarter, and have no grade lower than a "C."

HONOR GRADUATES

In order to qualify as an honor graduate, a student must have completed the requirements for graduation (see Graduation Requirements) with a 3.0 average on all work attempted at Surry Community College with no grade lower than "C."

GRADUATION REQUIREMENTS

Requirements for the degree or diploma will vary according to the curriculum. A minimum of 30 quarter hours must be taken at Surry Community College.

The student's overall grade point average must be 2.0 ("C") on work completed.

The student must have resolved all financial obligations to the college and returned all library and other college materials.

Candidates for degree or diplomas are requested to attend graduation exercises. It is the responsibility of each student to apply to the Student Personnel Office for his degree or certificate at the beginning of the last quarter prior to his program completion. The $10 graduation fee should be paid at this time.

TUITION AND FEES

Tuition and fees for each quarter are payable on the date of registration.

Financial aid is available to needy students. Information concerning this aid is available in another section of this catalog.

Tuition

Surry Community College offers educational opportunity at a minimum cost to the student. These charges are set by the State Board of Education and are subject to change. Current tuition fees to be paid by students upon enrollment are as follows:

(College Transfer Program)

The tuition fee is $3 per credit hour with a maximum tuition charge of $42 per quarter.

For out-of-state* students, tuition is $11.45 per credit hour with a maximum charge of $137.50 per quarter.

(Technical and Vocational Programs)

The tuition is $2.50 per credit hour with a maximum charge of 332 per quarter.

There is no extra tuition for out-of-state students enrolled in the Technical and Vocational Programs.

(Continuing Education Programs)

The cost per class for courses offered by the Continuing Education Department is $2.

If questions arise concerning legal residency, the Business Office should be contacted.

Auditing Classes

Auditing of classes is permitted by special arrangement of the Dean of Instruction and the instructor involved. Tuition for an audited class is the same as the tuition for that same class if taken for academic credit.

*To qualify for in-state tuition, a legal resident must have maintained his domicile in North Carolina for at least the twelve months next preceding the date of first enrollment or re-enrollment in the college.

Tuition for a class taken on independent study is the same as the tuition for that same class if taken on a regular basis.

TUITION FEE SUMMARY

Full-Time Student	In-State Tuition	Out-of-State Tuition
College Parallel	$42.00	$137.50
Technical and Vocational	32.00	32.00

Part-time Student	In-State Per Quarter Hour	Out-of-State Per Quarter Hour
College Parallel	$3.00	$11.45
Technical and Vocational	2.50	2.50

Activity Fee

All curriculum students taking twelve or more credit hours must pay an activity fee of $6 per quarter. A part-time student taking as many as five credit hours but less than twelve credit hours must pay an activity fee of $3. There is no activity fee for a student taking less than five credit hours.

These fees are used to assist in financing the college newspaper, yearbook, social events, cultural events, and athletics.

Insurance

Accident insurance, covering activities in school and commuting to and from school, is available for $3.50 per year (price subject to change). Students desiring this insurance should make payment when registering for the fall quarter or upon their initial enrollment.

Because this insurance provides only limited coverages, students are advised to read their policy carefully in order to be aware of the insurance provided.

Neither the college nor the State of North Carolina carries insurance to cover students for accidents.

Special Purpose Fees

Graduation Fees — A fee of $10 covering the expenses for diploma and cap and gown is payable at the beginning of the quarter in which the student expects to graduate.

Nursing Program Costs — Nursing students are required to purchase their uniforms and malpractice insurance. Also, nursing students are responsible for furnishing their own transportation to the sites of their clinical experience.

Late Registration Fee — Full-time students who have attended Surry Community College the quarter prior to any registration period may be assessed a $5 late registration fee when registering at a date later than the designated registration day. Part-time students may be assessed a $2 fee for late registration.

Car Registration Fee — Students who park vehicles on campus are required to pay a 50c per vehicle registration fee.

BOOKS AND SUPPLIES

A student is required to buy the necessary textbooks and supplies prescribed in the curriculum he is pursuing. The average cost of books will vary from $30 to $75 per quarter, depending upon the curriculum and the number of courses taken.

Books and supplies are sold during regular bookstore hours.

REFUND POLICY

A student who withdraws from a course or program is required to confer with his counselor and instructor and clear through the Office of Student Personnel and the Business Office. Failure to do so will result in a forfeit of refund or tuition credit.

Tuition Refund

Tuition refund for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases two-thirds (⅔) of the student's tuition may be refunded if the student withdraws within ten (10) calendar days after the first day of classes as published in the school calendar. Tuition refunds will not be considered for tuition of $5 or less. If a class or curriculum fails to materialize, all the tuition shall be refunded.

Re-Admission Refund of Tuition

When a student, having paid the required tuition and fees for a quarter, withdraws from the institution before the end of the quarter and the reasons for the withdrawal are found excusable by the administration of the institution, the student may be allowed credit for tuition and fees on a pro rata basis if he applies for re-admission during any of the next four calendar quarters and petitions in writing to be allowed such credit.

Student Activity Fees

Student activity fees are not refundable. However, if the class or curriculum in which a student enrolls fails to materialize, all the activity fee paid will be refundable.

Other Fees

Other listed fees are not refundable.

STUDENT FINANCIAL AID

The Student Financial Aid Program is designed to assist deserving students in meeting the costs of attending Surry Community College. It includes several types of aid: scholarships, grants, loans, and student employment. Financial aid awards may include one or more of these.

All financial assistance is awarded without regard to the student's race, color, or national origin.

In applying for financial aid, students must complete two forms: the Surry Community College Application for Financial Aid and the Parents Confidential Statement. These forms may be obtained from the high school guidance counselor or from the Director of Financial Aid.

Independent students must file a Students Financial Statement instead of the Parents Confidential Statement. Questions concerning independent status should de directed to the Financial Aid Director. These forms may also be obtained from the Financial Aid Office. An "independent student" is defined as being financially self supporting.

A student who has completed the financial aid application procedure is considered for the aid most suitable to his circumstances. Awards are made annually. An enrolled student must reapply in order to receive aid during his second year.

Basic Educational Opportunity Grant Programs

The Basic Educational Opportunity Grant Program is a federal aid program designed to provide financial assistance to those who need it to attend college. A special application is required to apply for this grant. A student must obtain the form "Request for Determination of Expected Family Contribution," complete it, and send to BEOG, Box 1842, Washington, DC 20013. This form may be obtained from your high school counselor or from the Director of Financial Aid.

Basic Grants are intended to be the "floor" of a financial aid package and may be combined with other forms of aid in order to meet the full costs of education. It is recommended that any student seeking financial assistance apply for the BEOG.

The BEOG is a grant and does not have to be repaid. It is estimated that during the 1874-75 academic year the awards will range between $50 and $800.

Supplemental Educational Opportunity Grants

The Supplemental Educational Opportunity Grant Program is sponsored by the federal government and was authorized under the Higher Education Act of 1972. A limited number of these grants will be available to students who have "exceptional financial need." Any student who completes the Application for Financial Aid is considered for this grant.

College Work-Study Program

Part-time jobs are available for students wishing to earn part of their college expenses. The job may be on campus or off campus with a public or private non-profit agency. The amount of work varies and is determined solely on need as determined by the Financial Aid Office.

Students applying for work-study must complete the application forms explained above. This type of aid is for hours worked in the form of wages, and there is no repayment.

Student Loan Programs

Detailed information may be obtained from your high school counselor or from the Director of Financial Aid. Available loan programs are as follows:

North Carolina Prospective Teachers Scholarship Loan
Guaranteed Loan Program
North Carolina Insured Student Loan Program
Educational Loans for Medical and Related Studies

Federal Nursing Scholarship Program

A limited number of Federal Nursing Scholarships are available to assist students having financial need to enroll in courses leading to careers in nursing.

Nursing students interested in applying for this scholarship should complete the application forms explained above.

Other Scholarships

The Surry Community College Foundation, Inc. provides scholarships for students in financial need. This form of aid is made possible by business firms and individuals who have contributed to this non-profit organization.

A number of local scholarships are provided by various clubs, organizations, businesses, and individuals. These are usually listed under the specific name of the club, organization, etc. Some of the recipients of these scholarships are chosen by the organization involved. Others are administered through the Financial Aid Office.

OFFICIAL TRANSCRIPTS

Upon request of the student, an official transcript of his record at Surry Community College will be sent to any college, university, or agency.

VETERANS

A full-time veterans office is maintained on campus. Students enrolling at Surry Community College who wish to use educational benefits under one of the government bills for veterans should make application to the Veterans Administration Office or the College veterans officer.

WITHDRAWAL

A student who withdraws should do so officially through the office of the Dean of Student Personnel and the Business Office. Failure to withdraw officially could result in the assignment of an "F" grade for the work attempted and in a forfeit of refunds or tuition credit.

When a student withdraws officially he may be given a "WP" or "WF" depending upon his current class standing or the insthuctor's evaluation of his status. When a student is absent five class meetings with no official notification to the instructor, he should be dropped from the class roll and the instructor should notify the Student Personnel Office.

EVENING CLASSES

The College offers evening and weekend classes primarily for those students who wish to pursue a part-time program while continuing to work full time. Full-time students may also enroll in evening classes.

An attempt is made each quarter to offer a selection of courses from each program of study. It is possible for a student to complete most programs through part-time study.

Schedules

A separate evening class bulletin and schedule is published each quarter and evening classes are listed in the regular schedule.

The evening office maintains waiting lists for classes, and requests for classes should be directed to that office.

Classes usually meet one or two evenings per week. For example, ENG 101 Freshman English I, a three-hour class, will be scheduled from 7 to 10 pm one evening per week; BUS 131 Principles of Accounting I, a five-contact-hour class, will meet two evenings from 7 to 9:30 p.m. Some lengthy vocational or technical classes may be scheduled over two quarters and given an A or B designation (i.e., ELN 101 Fundamentals of Electronics I will be divided into two courses—ELN 101A and ELN 101B; the credit and contact hours will be divided between the two quarters). The College follows this practice so that a student is not required to attend class more than two evenings per week.

Application

Application is made through the admissions office or the evening division office. New students should consult a representative of one of these offices before the registration period.

Admission

The College operates under an "Open Door" admissions policy. In general, the requirement is that the applicant have a desire to learn. High school graduation or its equivalent is required for admission to certain programs. The Continuing Education Division of the College offers a high school completion program for those who need it. For answers to specific admissions questions, the applicant should consult the evening director or a counselor and he should carefully read the admissions section of the general College catalog.

Credits

Courses offered in the evening parallel those in the day program and carry the same college credit. Day and evening classes are frequently taught by the same instructors.

Withdrawal

Should a student find it necessary to withdraw from the College or to withdraw from a course, he must withdraw officially at the College office. Failure to attend class or merely giving notice to an instructor will not be considered an official withdrawal and may result in a failing grade for the course.

Academic Regulations

Evening students are governed by the same regulations as day students.

CO-CURRICULAR ACTIVITIES

The College recognizes that a well-balanced education program provides some time for social, cultural, and recreational activities. The Office of the Dean of Student Personnel coordinates this aspect of college life.

The Student Government Association is composed of students elected by the student body. The purpose of the Student Government Association is to provide means for responsible student participation in the program of student affairs. Money to operate student activities is obtained from student activity fees.

INTERCOLLEGIATE ATHLETICS

on an intercollegiate level. The college is a member of the Western Tarheel Conference and Region X of the National Junior College Athletic Association.

INTRAMURALS

Activities including basketball, softball, tennis, golf, and table tennis are a part of the intramural program. All students are invited to participate in the intramural program.

JOB PLACEMENT SERVICE

Surry Community College offers a job placement service to graduates from the various programs. The office will offer job placement assistance for students interested in full- or part-time employment. Students interested in this service should contact the Placement Director.

Job vacancies from local and state businesses and industries are listed with the Placement Director. These vacancies are made known to students through periodic bulletins.

LEARNING RESOURCES CENTER

The Learning Resources Center includes library services, instructional media services, and in cooperation with the learning lab services, provides a central location for study and research. The library services provide all the printed and book materials, circulation, and reference services while the instructional media services include audio and video services, programming of instructional materials, and a dial access system.

The Learning Resources Center services are available to all the people of Surry County and the surrounding area as well as to the students, faculty, and staff of Surry Community College.

CONTINUING EDUCATION DIVISION

Surry Community College is committed to the continuing education of the adult citizens of its area of service. To fulfill this commitment, the College offers a variety of courses, conferences, workshops, and exhibits designed to meet adult educational needs.

Through the Continuing Education Division, students find opportunities to retrain and update themselves in employment, expand knowledge in general education, and develop creativity in the fine arts.

Continuing Education courses are offered when there is a community need and interest. Some courses are offered on a regular, continuing basis. Other courses may be initiated by requests from individuals and groups. Surry Community College cooperates with schools, community agencies, and business and industrial groups to provide an educational service.

Class Location

Many courses are provided on the college campus at Dobson. Other courses are provided in extension centers in the various communities of Surry and Yadkin counties. New classes may be formed whenever a sufficient number of persons show interest in a particular area of study.

Admission and Registration

Any person eighteen years of age or older may be admitted to a continuing education class. In extenuating circumstances, and upon approval of appropriate public school officials, persons under eighteen years of age may be admitted.

Course schedules are made quarterly and published.

Courses which begin between quarters are announced through local news media. Students are encouraged to contact the college and pre-register prior to the beginning of each course.

Fees

Fees vary with the type of course offered. Adult basic education courses supported primarily from state and federal funds are free of student cost. Other courses such as business education are partially self-supporting through student fees. Fees are announced in the course schedule and are paid at the first class session. Books and supplies are usually the responsibility of the student and may be purchased from the college bookstore.

Certificates

North Carolina High School Completion Certificates are awarded to students who successfully complete the Adult High School Program. For the successful completion of other adult education programs, the student is awarded an Achievement Certificate. A minimum of 75 per cent student attendance is required to receive a certificate of completion.

Continuing Education Unit

The Continuing Education Unit is granted by the Continuing Education Division of Surry Community College on the basis of one CEU for ten contact hours of class work. CEU information is recorded for each student and is available to employers and educational institutions upon request by the student. At the request of a student, the Dean of Student Personnel may grant college credit for continuing education credits earned.

Programs

Continuing Education Programs are offered in the following areas:

Professional In-service	Law Enforcement
Family Life	Firemanship Education
Academic Extension	Adult Basic Education
Adult High School	Business and Industrial Programs
Job Employment Training	Vocational In-service Education

Professional In-service Programs:

Library Administration	Teacher Renewal
Nurse Improvement	

Family Life:

Knitting	Furniture Refinishing
Creative Arts	Personal Care
Sewing	

Academic Extension:

Art	Photography
Crafts	Income Taxes

Adult High School Program (Programmed Learning Lab)

The Programmed Instruction Learning Laboratory provides an opportunity for any interested adult to study any of over two hundred programmed instruction courses ranging in difficulty from the elementary school level to the college level. Each course is presented in a book which reduces the course content into simple, step-by-step units. Individuals studying most of these courses are completely free to set their own study pace. Students who are advised to complete phases of programs leading to a high school diploma or who are advised to do remedial study in association with a college course of study, are expected to show steady progress toward a pre-determined objective of learning laboratory study. There are not teacher-administered tests, grade assignments, or set speeds of completion for most programmed instruction courses.

Individual instruction and personal achievement are emphasized in each of the instructional areas. The objective is to help adults progress from their present educational level through a functional level of twelfth grade.

Level One: Non-readers through grade four: basic reading, writing, and arithmetic.

Level Two: Grade five through grade eight: reading improvement, English expression, arithmetic, geography, and social studies.

Level Three: Grade nine through grade twelve: reading improvement, English expression, mathematics, science, social studies.

Many courses are included in each of the following areas:

English
Foreign Language
Leisure Activities
Health and Safety
Social Sciences
Mathematics
Psychology
Reading
Science and Technology

No fee is charged for student use of the Programmed Learning Laboratory.

Any person interested in the Programmed Instructional Learning Laboratory should contact the Learning Laboratory Coordinator, Surry Community College, Dobson, North Carolina 27017.

VETERANS: If you were separated from active military service after January 31, 1955, you can receive full assistance from the Veterans Administration while you are completing high school without a charge against your basic allotment. This means you will still have your full allotment to go to college after finishing high school on the G. I. Bill.

General Educational Development (GED) Test

Individuals who wish to receive the Certificate of High School Equivalency may apply to take the General Educational Development Test at the college. A schedule of test dates will be made available to interested persons on request.

A total score of 225 or more with no single test below a standard score of 35 is considered passing and qualifies the applicant to receive the certificate issued by the State Department of Public Instruction.

Any person who is not a high school graduate may apply for the certificate and the GED test if (1) he is eighteen (18) years of age or older; (2) he is a resident of the state; and (3) he has a definite vocational or educational purpose.

Individuals 16-18 years of age who are not enrolled in a public high school may be considered persons with special needs and may be permitted to take the high school equivalency examination. This is allowable only if the application for admission to the examination is endorsed by a local superintendent of schools or his authorized representative, or a release form is obtained from the office of the local superintendent.

ADULT HIGH SCHOOL RINGS: One may order the adult high school ring through the college bookstore.

Law Enforcement Training

Law Enforcement Training is provided at the request of law enforcement personnel. Courses are especially designed as in-service and pre-service education for those engaged in law enforcement activities. Courses are offered in many areas such as the following:

- Courts and Laws
- Elements of Offenses
- Motor Vehicle Law
- Criminal Investigation
- Report Writing
- Photography
- Juveniles
- Applied Psychology
- Human Relations
- Instructor Training
- Firearms

In addition, the college offers a 160-hour course designed to meet the State of North Carolina certification requirements for new officers.

Fire Service Training

Fire Service Training is designed to provide firemen the opportunity to gain technical skills in modern fire fighting. The classes are taken directly to the firemen through training sessions held in local departments. Among the courses offered are the following:

- Introduction to Fire Fighting
- Fire Fighting Procedures
- Arson Detection
- Rescue Practices
- Forcible Entry
- Protective Breathing Equipment
- Ventilation

Adult Basic Education

Adult Basic Education classes are available to adults who wish to learn to read and write or prepare for entry into the High School Completion Program. Reading, writing, mathematics, history, and English are emphasized; however, students who wish to study in only one or two areas may do so. Persons who complete Level I (grades 1-4) and Level II (grades 5-8) will be issued a certificate by Surry Community College, and those who complete Level II are eligible to enroll in the High School Completion Program.

Adult Basic Education classes are located in several communities. Materials and instruction are provided without cost to the student. For information about the class nearest you, call the coordinator of Adult Basic Education at 386-8121.

Business and Industrial Programs

Business Management Courses are planned for employees in wholesale and retail occupations. Emphasis is placed on improving customer and job relations, making the best use of advertising, improving individual personality and salesmanship, developing oral communications, and training individuals to function more effectively in their respective occupations. Courses are offered in the following subject areas:

Job Relations in Business	Creative Salesmanship
Customer Relations	Advertising
Personality Development	Marketing Research

Management Development Program

Management Development Program Courses are designed for potential and active supervisors who want to prepare for more effective leadership and advancement. Courses are offered at the college campus or in industrial plants. The courses are flexible in terms of content and meeting times. Every effort is made to fit course content to particular industrial or business needs. Courses are available in the following subject areas:

Principles of Supervision (Seven Parts)
Human Relations I and II
Art of Motivating People
Economics in Business and Industry
Effective Communications
Effective Writing
Effective Speaking
Reading Improvement
The Supervisor in North Carolina
Job Analysis Training
Work Measurement
Job Methods
Conference Leadership
Job Instruction Training
Creative Thinking
Industrial Safety and Accident Prevention
Industrial First Aid
Cost Accounting for Supervisors
Supervision in Hospitals
The Supervisor and Employee Benefits

Supervisors who wish to complete requirements for the state diploma should meet the following requirements:

MANAGEMENT DEVELOPMENT DIPLOMA PROGRAM

Course	
Principles of Supervision	33 Class hours
OSHA and First Aid	33 Class hours
Human Relations and Motivation	33 Class hours
Effective Communications	33 Class hours
Supervisory Guidance and Counseling	33 Class hours
Total Requirements	165 Class hours

New Industry Training

Courses in New Industry Training are designed to meet the training needs of an industry. Industrial training specialists are available for assistance in program planning.

Vocational In-Service Education

Non-curriculum short courses are planned especially for adults who desire to update themselves in skilled and technical areas. Areas in which courses may be planned are:

Air Conditioning	Small Engine Repair
Brick Masonry	Custodial Training
New Industry Training	Blueprint Reading
Carpentry	Manpower Development Training
Food Service	Sewing Machine Mechanics

Job Employment Training (JET) Program

The Job Employment Training Program, known as JET, is a manpower development program especially designed to assist those persons who are unemployed or those having difficulty holding a job.

The JET Program consists of a class of eight weeks, meeting six hours per day, five days per week. Three hours per day are devoted to Adult Basic Education. These three hours could be a part of a vocational, technical, or other college class depending on the need of the student. The remaining three hours per day involve Human Resource Development which is taught through group activity and designed to acquaint the student with the world of work. Proper approaches to finding a suitable job and what is needed to keep the job after obtaining it are stressed.

Those students who qualify through the Employment Security Commission may be paid a stipend each week.

Special attention is given to the needs of each individual student, and special effort is made to assist the student in obtaining employment the the end of the program.

THE COLLEGE TRANSFER —LIBERAL ARTS PROGRAM

Associate in Arts Degree

The College transfer program is designed to parallel the freshman and sophomore years of study of a four-year college or university.

In the first two years of college, students pursue a program of general education in the area of humanities, social studies, science, and mathematics. Surry Community College provides counseling to help students plan their program for transfer to the college of their choice.

Each student will structure his own program in conference with his counselor and/or advisor. The structure of each student's program should be based on high school records, aptitude, vocational goal, and choice of college to which he plans to transfer.

REQUIREMENTS FOR AN ASSOCIATE IN ARTS DEGREE

English 101, 102, 103	9 hours
History	9 hours
Science — (Biology, Physical Science, Chemistry, or Physics)	9-12 hours
Mathematics 101, 102, 103, or 105-106	9-10 hours
Physical Education	3 hours

Plus enough electives to complete 96 quarter hours.

The first two years of college preparation for many occupations and professions may be taken at Surry Community College. Some of these fields are:

Accounting

Banking and Finance

Business Administration

Business Education

Child Care Occupations

Counseling

Dentistry

Education

Engineering (Mechanical, Electrical, Textile, Civil, Chemical)

Forestry and Conservation Occupations

Insurance

Journalism

Law

Library Science

Mathematics

Medicine

Ministry

Nursing (and other allied health fields)

Psychology

Real Estate

Sales

Social Services

Veterinary Medicine

COLLEGE TECHNICAL DIVISION

(Associate in Applied Science Degree)

The programs in the technology areas are designed to prepare students with technical competence for immediate employment in either business, industry, government, the health occupations fields, agriculture, social services, or as owner-manager of their firms. General education subjects are included as necessary adjuncts to these occupational programs.

Programs of Study

Business Technologies
- General Business Management
- Executive Secretarial Technology
- Medical Secretarial Technology
- Legal Secretarial Technology
- General Office Technology
- Court Reporting Technology
- Accounting Technology
- Retail Management Technology

Engineering Technologies
- Electronics Technology
- Drafting and Design Technology (Mechanical)
- Machinist Technology

Health Careers Technology
- Martin Memorial Associate Degree Nursing Program

Agricultural Technologies
- Agricultural Technology
- Agricultural Business
- Recreation Grounds Management
- Horticulture
- Soil Conservation

Auxiliary Education
- Library Assistant
- Early Childhood Specialist
- Recreation Technology
- Teacher's Assistant

Criminal Justice-Protective Service Technology
(To begin in 1975)
- Law Enforcement
- Security Services
- Correctional Technology

GENERAL BUSINESS MANAGEMENT

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
BUS 105	Business Math	5	0	5
BUS 125	Elements of Economics I	3	0	3
	Electives			6
				17

Second Quarter				
ENG 102	Freshman English II	3	0	3
BUS 126	Elements of Economics II	3	0	3
BUS 131	Principles of Accounting I	2	3	3
	Electives			6
				15

Third Quarter				
ENG 103	Freshman English III	3	0	3
BUS 132	Principles of Accounting II	2	3	3
BUS 110	Office Machines I	2	2	3
	Electives			6
				15

Fourth Quarter				
BUS 133	Principles of Accounting III	2	3	3
BUS 115	Business Law I	3	0	3
SPH 101	Speech I	3	0	3
	Electives			6
				15

Fifth Quarter				
BUS 251	Cost Accounting I	2	3	3
ENG 206	Business Communications	3	0	3
BUS 116	Business Law II	3	0	3
	Electives			9
				18

Sixth Quarter				
BUS 229	Taxes	3	0	3
BUS 275	Principles of Insurance	3	0	3
EDP 104	Introduction to Data Processing	3	0	3
	Electives			7
				16
			Total Credits:	96

EXECUTIVE SECRETARIAL TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 105	Business Math	5	0	5
		13	5	15
Second Quarter				
ENG 102	Freshman English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 107	Shorthand II	3	2	4
BUS 131	Principles of Accounting I	2	3	3
	Elective			3
				16
Third Quarter				
ENG 103	Freshman English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 108	Shorthand III	3	2	4
BUS 118	Machine Transcription I	2	3	3
	Elective			3
				16
Fourth Quarter				
SPH 101	Speech I	3	0	3
BUS 206E	Dictation & Transcription	3	2	4
BUS 205	Advanced Typewriting	2	3	3
BUS 110	Office Machines I	2	2	3
	Elective			3
				16
Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 207E	Dictation & Transcription	3	2	4
BUS 214	Secretarial Procedures	3	2	4
BUS 210	Filing	3	0	3
	Elective			3
				17
Sixth Quarter				
BUS 208E	Dictation & Transcription	3	2	4
BUS 209	Production Typewriting	2	3	3
BUS 215	Office Application	3	12	6
	Elective			3
				16
		Total Credits:		96

MEDICAL SECRETARIAL TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 105	Business Math	5	0	5
		13	5	15
Second Quarter				
ENG 102	Freshman English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 107	Shorthand II	3	2	4
BUS 180M	Medical Terminology and Vocabulary	3	0	3
BUS 181M	Anatomy for the Medical Secretary	3	0	3
		14	5	16
Third Quarter				
ENG 103	Freshman English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 108	Shorthand III	3	2	4
BUS 280M	Medical Terminology and Vocabulary	3	0	3
BUS 281M	Anatomy for the Medical Secretary	3	0	3
		14	5	16
Fourth Quarter				
SPH 101	Speech I	3	0	3
BUS 206M	Dictation & Transcription	3	2	4
BUS 205	Advanced Typewriting	2	3	3
BUS 131	Principles of Accounting I	2	3	3
BUS 118	Machine Transcription I	2	3	3
		13	8	16
Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 207M	Dictation & Transcription	3	2	4
BUS 214	Secretarial Procedures	3	2	4
BUS 110	Office Machines I	2	2	3
BUS 210	Filing	3	0	3
		14	6	17
Sixth Quarter				
BUS 208M	Dictation & Transcription	3	2	4
BUS 209	Production Typewriting	2	3	3
BUS 215	Office Application	3	12	6
	Elective			3
				16

Total Credits: 96

LEGAL SECRETARIAL TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 106	Shorthand I	3	2	4
BUS 105	Business Math	5	0	5
BUS 115	Business Law I	3	0	3
		16	5	18
Second Quarter				
ENG 102	Freshman English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 107	Shorthand II	3	2	4
BUS 131	Principles of Accounting I	2	3	3
	Elective			3
				16
Third Quarter				
ENG 103	Freshman English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 108	Shorthand III	3	2	4
BUS 118	Machine Transcription I	2	3	3
	Elective			3
				16
Fourth Quarter				
SPH 101	Speech I	3	0	3
BUS 205	Advanced Typewriting	3	2	4
BUS 206L	Dictation & Transcription	3	2	4
BUS 110	Office Machines I	2	2	3
BUS 190L	Legal Terminology & Vocabulary	3	0	3
				16
Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 207L	Dictation & Transcription	3	2	4
BUS 214	Secretarial Procedures	3	2	4
BUS 210	Filing	3	0	3
	Elective			3
				17
Sixth Quarter				
BUS 208L	Dictation and Transcription	3	2	4
BUS 209	Production Typewriting	2	3	3
BUS 215	Office Application	3	12	6
		8	17	13
		Total Credits:		96

GENERAL OFFICE TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 105	Business Math	5	0	5
BUS 115	Business Law I	3	0	3
	Elective			3
		—	—	—
				17
Second Quarter				
ENG 102	Freshman English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 118	Machine Transcription	2	3	3
BUS 101	Introduction to Business	3	0	3
BUS 131	Principles of Accounting I	2	3	3
		—	—	—
		12	9	15
Third Quarter				
ENG 103	Freshman English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 119	Machine Transcription	2	3	3
BUS 132	Principles of Accounting II	2	3	3
	Elective			3
		—	—	—
				15
Fourth Quarter				
SPH 101	Speech I	3	0	3
BUS 110	Office Machines I	2	2	3
EDP 104	Introduction to Data Processing	3	0	3
BUS 218	Machine Transcription	2	3	3
BUS 205	Advanced Typewriting	2	3	3
	Elective			3
		—	—	—
				18
Fifth Quarter				
ENG 206	Business Communications	3	0	3
BUS 214	Secretarial Procedures	3	2	4
BUS 210	Filing	3	0	3
BUS 219	Machine Transcription IV	2	3	3
	Elective			3
		—	—	—
				16
Sixth Quarter				
BUS 209	Production Typewriting	2	3	3
BUS 271	Office Management	3	0	3
	Electives			12
		—	—	—
				18
		Total Credits:		99

COURT REPORTING TECHNOLOGY

First Quarter		Lec.	Lab.	Credi
ENG 101	Freshman English I	3	0	3
BUS 102	Typewriting I	2	3	3
BUS 141	Machine Shorthand I	5	4	6
BUS 115	Business Law 1	3	0	3
		13	7	15

Second Quarter				
ENG 102	Freshman English II	3	0	3
BUS 103	Typewriting II	2	3	3
BUS 142	Machine Shorthand II	5	4	6
BUS 180M	Medical Terminology and Vocabulary	3	0	3
	Elective			3
				18

Third Quarter				
ENG 103	Freshman English III	3	0	3
BUS 104	Typewriting III	2	3	3
BUS 143	Machine Shorthand III	5	4	6
BUS 280M	Medical Terminology and Vocabulary II	3	0	3
		13	7	15

Fourth Quarter				
SPH 101	Speech I	3	0	3
BUS 205	Advanced Typewriting	2	3	3
BUS 200	Machine Shorthand IV	5	4	6
BUS 190L	Legal Terminology and Vocabulary	3	0	3
		13	7	15

Fifth Quarter				
SPH 102	Speech II	3	0	3
BUS 201	Machine Shorthand V	5	4	6
BUS 240	Court Reporting I	0	10	5
	Elective			3
				17

Sixth Quarter				
BUS 202	Machine Shorthand VI	5	4	6
BUS 242	Court Reporting II	0	10	5
	Electives			6
				17
			Total Credits:	97

ACCOUNTING TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
BUS 105	Business Math	5	0	5
BUS 125	Elements of Economics I	3	0	3
BUS 131	Principles of Accounting I	2	3	3
	Elective			3
				17
Second Quarter				
ENG 102	Freshman English II	3	0	3
BUS 126	Elements of Economics II	3	0	3
BUS 132	Principles of Accounting II	2	3	3
BUS 101	Introduction to Business	3	0	3
	Elective			3
				15
Third Quarter				
ENG 103	Freshman English III	3	0	3
BUS 133	Principles of Accounting III	2	3	3
BUS 110	Office Machines I	2	2	3
BUS 271	Office Management	3	0	3
	Elective			3
				15
Fourth Quarter				
BUS 236	Intermediate Accounting I	2	3	3
SPH 101	Speech I	3	0	3
BUS 115	Business Law I	3	0	3
BUS 124	Personal Finance	3	0	3
	Elective			3
				15
Fifth Quarter				
BUS 251	Cost Accounting I	2	3	3
ENG 206	Business Communications	3	0	3
BUS 237	Intermediate Accounting II	2	3	3
BUS 272	Principles of Supervision	3	0	3
BUS 116	Business Law II	3	0	3
	Elective			3
				18
Sixth Quarter				
BUS 229	Taxes	3	0	3
BUS 238	Auditing	2	3	3
EDP 104	Introduction to Data Processing	3	0	3
BUS 275	Principles of Insurance	3	0	3
	Elective			4
				16
			Total Credits:	96

RETAIL MANAGEMENT TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
BUS 105	Business Math	5	0	5
BUS 125	Elements of Economics	3	0	3
BUS 110	Office Machines I	2	2	3
	Elective			3
		—	—	—
				17
Second Quarter				
BUS 101	Introduction to Business	3	0	3
ENG 102	Freshman English II	3	0	3
BUS 131	Principles of Accounting I	2	3	3
BUS 173	Retailing I	3	0	3
BUS 130	Cooperative Work Study	1	4	3
		—	—	—
		12	7	15
Third Quarter				
SPH 101	Speech I	3	0	3
PSY 110	Human Relations in Management	3	0	3
BUS 273	Retailing II	3	0	3
	Elective			3
		—	—	—
				12
Fourth Quarter				
BUS 243	Advertising	3	0	3
BUS 239	Marketing	3	0	3
ENG 206	Business Communications	3	0	3
BUS 221	Credit Procedures	3	0	3
BUS 232	Sales Development	3	0	3
	Elective			3
		—	—	—
				18
Fifth Quarter				
BUS 274	Personnel Management	3	0	3
BUS 249	Buying & Merchandising I	3	0	3
BUS 262	Fashions in Retailing	2	2	3
BUS 241	Sales Promotion & Management	2	2	3
BUS 260	Commercial Design & Display	2	3	3
	Elective			3
		—	—	—
				18
Sixth Quarter				
BUS 250	Buying & Merchandising II	3	0	3
BUS 271	Office Management	3	0	3
BUS 230	Retail Applications	2	8	7
	Electives			6
		—	—	—
				19
			Total Credits:	99

ELECTRONICS TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
MAT 110	Technical Mathematics I	5	0	5
PHY 101	Physics: Mechanics	3	2	4
DFT 101	Technical Drafting I	1	5	3
ELN 101	Fundamentals of Electronics I	4	5	6
		16	12	21

Second Quarter				
ENG 102	Freshman English II	3	0	3
MAT 111	Technical Mathematics II	5	0	5
PHY 102	Physics: Properties of Matter	3	2	4
ELN 102	Fundamentals of Electronics II	4	5	6
	Elective			3
				21

Third Quarter				
ENG 103	Freshman English III or			
205	Report Writing	3	0	3
MAT 112	Technical Mathematics III	5	0	5
ELN 103	Vacuum Tubes & Solid State Devices	8	8	10
		16	8	18

Summer — Optional

Program options with adequate enrollment.

1. Attend summer quarter and continue into second year studies for the Associate in Applied Science Degree.
2. Attend summer quarter and terminate studies graduating with a Vocational Diploma.

3. Not attend summer quarter and continue second year studies Fourth Quarter for the Associate in Applied Science Degree.

ELN 104	Radio & Television Servicing	4	8	8
ELN 105	Electronic Systems Maintenance	4	8	8
		8	16	16

Fourth Quarter

SPH 101	Speech I	3	0	3
MAT 201	Technical Mathematics IV	5	0	5
PHY 104	Physics: Light and Sound	3	2	4
ELN 201	Solid State Device Applications	5	5	7
		16	7	19

Fifth Quarter

DFT 104	Electronic Drafting	2	3	3
ELN 202	Electronic Communications Systems	7	5	9
MAT 202	Digital Computer Mathematics	5	0	5
		14	8	17

Sixth Quarter

ELN 203	Industrial and Digital Electronic Systems	7	6	10
	Social Science Elective			3
	Elective			3
				16

Total Credits
With Option: 128

Without Option: 112

DRAFTING AND DESIGN TECHNOLOGY (MECHANICAL)

		Lec.	Lab.	Credit
First Quarter				
ENG 101	Freshman English I	3	0	3
MAT 110	Technical Mathematics I	5	0	5
PHY 101	Mechanics	3	2	4
DFT 101	Technical Drafting I	1	5	3
MEC 101	Machine Processes I	1	5	3
		13	12	18
Second Quarter				
ENG 102	Freshman English II	3	0	3
MAT 111	Technical Mathematics II	5	0	5
PHY 102	Properties of Matter & Heat	3	2	4
DFT 102	Technical Drafting II	1	5	3
MEC 102	Machine Processes II	1	5	3
		13	12	18
Third Quarter				
ENG 103	Freshman English III or			
205	Reporting Writing	3	0	3
MAT 112	Technical Mathematics III	5	0	5
PHY 103	Electricity	3	2	4
PHY 106	Applied Mechanics	5	0	5
DFT 103	Technical Drafting III	1	5	3
		17	7	20
Fourth Quarter				
SPH 101	Speech I	3	0	3
DFT 201	Technical Drafting IV	2	6	4
DFT 204	Descriptive Geometry	2	4	4
MEC 205	Strength of Materials	3	2	4
MEC 210	Physical Metallurgy	3	3	4
		13	15	19
Fifth Quarter				
DFT 205	Design Drafting I	2	6	4
DFT 211	Mechanisms	3	2	4
MEC 211	Physical Metallurgy	3	3	4
	Elective			4
	Social Science Elective			3
				19
Sixth Quarter				
DFT 206	Design Drafting II	2	6	4
MEC 235	Hydraulics and Pneumatics	3	3	4
DFT 212	Jig and Fixture Design	2	4	4
	Social Science Elective	3	0	3
	Elective			3
				18
		Total Credits:		112

MACHINIST TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
MEC 151	Machine Shop Theory & Practice I	3	12	9
MAT 151	Fundamentals of Mathematics	5	0	5
PHY 151	Applied Science	3	2	4
ENG 151	Reading Improvement	2	0	2
DFT 164	Blueprint Reading: Mechanical	1	2	2
		14	16	22

Second Quarter				
MEC 152	Machine Shop Theory & Practice II	3	12	9
MAT 153	Geometry	3	0	3
PHY 152	Applied Science	3	2	4
ENG 152	Communications Skills	3	0	3
DFT 165	Blueprint Reading: Mechanical	1	2	2
WLD 161	Basic Gas Welding	0	3	1
		13	19	22

Third Quarter				
MEC 153	Machine Shop Theory & Practice III	3	12	9
MAT 152	Algebra	3	0	3
MEC 103	Treatment of Ferrous Metals	2	2	3
PSY 151	Human Relations	3	0	3
DFT 161	Applied Mechanical Drawing	1	4	3
		12	18	21

Fourth Quarter				
MEC 154	Machine Shop Theory & Practive IV	3	12	9
MEC 104	Treatment of Non Ferrous Metals	2	2	3
BUS 152	Industrial Organization	3	0	3
DFT 162	Applied Mechanical Drawing	1	4	3
MAT 154	Trigonometry	3	0	3
		12	18	21

(Vocational Option in Machinist Technology on Following Page)

* VOCATIONAL OPTION

Fifth Quarter

MEC 251	Machine Shop Theory & Practice V	2	10	7
MAT 110	Technical Mathematics I	5	0	5
EGR 105	Engineering Graphics I	2	4	3
	Elective			3
		—	—	—
				18

Sixth Quarter

MEC 252	Machine Shop Theory & Practice VI	2	10	7
MAT 111	Technical Mathematics II	5	0	5
EGR 106	Engineering Graphics II	2	4	3
	Elective			3
		—	—	—
				18

Seventh Quarter

MEC 253	Machine Shop Theory & Practice VII	2	10	7
MAT 112	Technical Mathematics III	5	0	5
	Electives			6
		—	—	—
				18

* Upon completion of the first four quarters students have the option of graduating with a one-year vocational diploma or continuing for the remaining three quarters and being awarded the Associate In Applied Science Degree.

Total Credits
Diploma: 86
Degree: 140

ASSOCIATE DEGREE NURSING PROGRAM

First Quarter		Lec.	Lab.	Credit
NUR 101	Nursing I	4	6	6
BIO 104	Anatomy and Physiology	3	3	4
ENG 101	Freshman English I	3	0	3
PSY 101	General Psychology I	3	0	3
CHM 111	Chemistry	2	2	3
		15	11	19
Second Quarter				
NUR 102	Nursing II	5	9	8
BIO 105	Anatomy and Physiology	3	3	4
BIO 106	Microbiology	3	3	4
		11	15	16
Third Quarter				
NUR 103	Nursing III	5	9	8
ENG 102	Freshman English II	3	0	3
PSY 201	Growth and Development	3	0	3
PSY 102	General Psychology II	3	0	3
		14	9	17
Fourth Quarter				
NUR 104	Nursing IV	4	8	6
Fifth Quarter				
NUR 205	Nursing V	5	12	9
ENG 103	Freshman English III	3	0	3
PED 101	Soccer & Speedball			
or 202	Table Tennis & Volleyball	0	2	1
	Elective			3
				16
Sixth Quarter				
NUR 206	Nursing VI	5	12	9
PHY 110	Physics	2	2	3
SOC 201	Introduction to Sociology	3	0	3
PED 102	Gymnastics & Basketball	0	2	1
		11	14	16
Seventh Quarter				
NUR 207	Nursing VII	5	15	10
NUR 208	Current Concepts in Nursing	2	0	2
BIO 111	Nutrition	3	0	3
PED 103	Softball & Archery	0	2	1
		10	17	16
		Total Credits:		106

AGRICULTURAL TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
BUS 105	Business Math	5	0	5
BUS 115	Business Law	3	0	3
AGR 185	Soil Science I	3	2	4
CHM 101	Chemistry I	3	3	4
		17	5	19

Second Quarter				
ENG 102	Freshman English II	3	0	3
AGR 170	Plant Science	3	2	4
AGR 104	Agricultural Economics	3	0	3
CHM 102	Chemistry II	3	3	4
	Social Science Elective			3
				17

Third Quarter				
ENG 205	Report Writing	3	0	3
AGR 151	Plant Materials I	2	4	4
AGR 278	Weed Identification & Control	3	0	3
AGR 125	Animal Science	3	2	4
CHM 103	Chemistry III	3	3	4
		14	9	18

Fourth Quarter				
AGR 200	Internship in area of specialization supervised by instructor with 3 hours per week evening class for evaluation and planning	3	300	12

Fifth Quarter

SPH 101	Speech I	3	0	3
AGR 152	Plant Materials II	2	4	4
AGR 290	Soil Conservation I	2	4	4
AGR 285	Soil Fertility	2	4	4
		9	12	15

Sixth Quarter

AGR 205	Marketing	3	0	3
AGR 201	Agricultural Chemicals	3	2	4
AGR 291	Soil Conservation II	2	4	4
AGR 274	Pasture & Foliage Crops	2	4	4
	Elective			3
				18

Seventh Quarter

BUS 229	Taxes	3	0	3
AGR 145	Entomology	3	0	3
AGR 279	Farm Forestry	3	0	3
AGR 292	Soil Conservation III	2	4	4
AGR 270	Bacteriology	2	4	4
		13	8	17
		Total Credits:		116

AGRICULTURAL BUSINESS

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
BUS 105	Business Math	5	0	5
BUS 115	Business Law I	3	0	3
AGR 185	Soil Science I	3	2	4
		14	2	15
Second Quarter				
ENG 102	Freshman English II	3	0	3
AGR 170	Plant Science	3	2	4
AGR 104	Agricultural Economics	3	0	3
BUS 131	Accounting I	2	3	3
	Social Science Elective			3
				16
Third Quarter				
ENG 205	Report Writing	3	0	3
AGR 125	Animal Science	3	2	4
	AGR Elective			4
	Electives			6
				17
Fourth Quarter (Optional)				
AGR 200	Internship in area of specialization supervised by instructor with 3 hours per week evening class for evaluation and planning	3	300	12
Fifth Quarter				
SPH 101	Speech I	3	0	3
AGR 251	Landscape Gardening	3	2	4
	AGR Elective			4
	Elective			5
				16
Sixth Quarter				
ENG 206	Business Communications	3	0	3
AGR 205	Marketing	3	0	3
PSY 110	Human Relations in Management	3	0	3
	AGR Elective			4
	Elective			3
				16
Seventh Quarter				
BUS 229	Taxes	3	0	3
	AGR Elec'ives			8
	Electives			6
				17
			Total Credits:	109

RECREATION GROUNDS MANAGEMENT

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
BUS 105	Business Math	5	0	5
BUS 115	Business Law I	3	0	3
AGR 185	Soil Science I	3	2	4
DFT 101	Drafting I	1	5	3
		15	7	18

Second Quarter				
ENG 102	Freshman English II	3	0	3
AGR 170	Plant Science	3	2	4
AGR 104	Agricultural Economics	3	0	3
	Social Science Elective			3
	Elective			3
				16

Third Quarter				
ENG 205	Report Writing	3	0	3
AGR 151	Plant Materials I	2	4	4
AGR 278	Weed Identification & Control	3	0	3
AGR 165	Plant Pathology	3	2	4
AGR 155	Arboriculture	3	2	4
		14	8	18

Fourth Quarter				
AGR 200	Internship in area of specialization supervised by instructor with 3 hours per week evening class for evaluation and planning	3	300	12

Fifth Quarter

AGR 152	Plant Material II	2	4	4
AGR 251	Landscape Gardening	3	2	4
AGR 285	Soil Fertility	2	4	4
AGR 290	Soil Conservation I	2	4	4
AGR 105	Grounds Management and Equipment I	1	3	2
		10	17	18

Sixth Quarter

AGR 252	Landscape Gardening II	3	2	4
AGR 106	Grounds Management and Equipment II	1	3	2
PSY 110	Human Relations in Management	3	0	3
	Social Science Elective			3
	Elective			3
				15

Seventh Quarter

BUS 229	Taxes	3	0	3
AGR 145	Entomology	3	0	3
AGR 107	Grounds Management and Equipment III	1	3	2
AGR 258	Turf Grasses	1	4	3
	Elective			5
				16
			Total Credits:	113

HORTICULTURE

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
BUS 105	Business Math	5	0	5
AGR 185	Soil Science I	3	2	4
CHM 101	Chemistry I	3	4	4
		14	6	16
Second Quarter				
ENG 102	Freshman English II	3	0	3
AGR 170	Plant Science	3	2	4
AGR 104	Agricultural Economics	3	0	3
	Social Science Elective			3
	Elective			3
				16
Third Quarter				
ENG 205	Report Writing	3	0	3
AGR 151	Plant Materials I	2	4	4
AGR 165	Plant Pathology	3	2	4
AGR 155	Arboriculture	3	2	4
		11	8	15
Fourth Quarter				
AGR 200	Internship in area of specialization supervised by instructor with 3 hours per week evening class for evaluation and planning	3	300	12
Fifth Quarter				
SPH 101	Speech I	3	0	3
AGR 152	Plant Materials II	2	4	4
AGR 251	Landscape Gardening	3	2	4
AGR 285	Soil Fertilization	2	4	4
AGR 256	Nursery & Greenhouse Mgt.	2	4	4
		12	14	19
Sixth Quarter				
AGR 205	Marketing	3	0	3
AGR 201	Agricultural Chemicals	3	4	5
AGR 252	Landscape Gardening II	3	2	4
AGR 257	Nursery & Greenhouse Mgt.	2	4	4
		11	10	16
Seventh Quarter				
AGR 145	Entomology	3	0	3
AGR 270	Bacteriology	2	4	4
AGR 258	Turf Grasses	1	4	3
	Electives			6
				16
		Total Credits:		110

SOIL CONSERVATION

		Lec.	Lab.	Credit
First Quarter				
ENG 101	Freshman English I	3	0	3
BUS 105	Business Math	5	0	5
AGR 185	Soil Science I	3	2	4
CHM 101	Chemistry I	3	3	4
		14	6	16
Second Quarter				
ENG 102	Freshman English II	3	0	3
AGR 170	Plant Science	3	2	4
AGR 104	Agricultural Economics	3	0	3
CHM 102	Chemistry II	3	3	4
	Social Science Elective			3
				17
Third Quarter				
ENG 205	Report Writing	3	0	0
AGR 151	Plant Materials I	2	4	4
AGR 278	Weed Identification & Control	3	0	3
AGR 125	Animal Science	3	2	4
CHM 103	Chemistry III	3	3	4
		14	9	18
Fourth Quarter				
AGR 200	Internship in area of specialization supervised by instructor with 3 hours per week evening class for evaluation and planning	3	300	12
Fifth Quarter				
SPH 101	Speech I	3	0	3
AGR 152	Plant Material II	2	4	4
AGR 290	Soil Conservation I	2	4	4
AGR 285	Soil Fertility	2	4	4
	Elective			3
				18
Sixth Quarter				
AGR 201	Agricultural Chemicals	3	4	5
AGR 291	Soil Conservation II	2	4	4
AGR 274	Pasture & Foliage Crops	2	4	4
	Elective			3
				16
Seventh Quarter				
AGR 279	Farm Forestry	3	0	3
AGR 292	Soil Conservation III	2	4	4
AGR 270	Bacteriology	2	4	4
AGR 258	Turf Grasses	1	4	3
	Elective			3
				17
		Total Credits:		114

LIBRARY ASSISTANT

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
PSY 103	Human Potential Seminar	2	0	2
BUS 102	Typewriting I	2	3	3
AUD 101	Audio Visual Aids	2	2	3
HIS 101	History of Western Civ. I	3	0	3
SOC 105	Introduction to Human Resources	2	0	2
		14	5	16
Second Quarter				
ENG 102	Freshman English II	3	0	3
PSY 101	General Psychology I	3	0	3
SOC 201	Introduction to Sociology	3	0	3
HIS 102	History of Western Civ. II	3	0	3
LIB 101	Introduction to Library Services	3	0	3
BUS 103	Typewriting II	2	3	3
		17	3	18
Third Quarter				
ENG 103	Freshman English III	3	0	3
PSY 102	General Psychology II	3	0	3
EDP 104	Introduction to Data Processing	3	0	3
EDU 110	Practicum/Seminar	0	6	3
HIS 103	History of Western Civ. III	3	0	3
		12	6	15
Fourth Quarter				
SPH 101	Speech I	3	0	3
ENG 201	English Literature I	3	0	3
LIB 201	Library Processes I	3	0	3
ENG 225	Children's Literature	3	0	3
EDU 210	Practicum/Seminar	0	6	3
		12	6	15
Fifth Quarter				
AUD 201	Media Production	2	3	3
ENG 202	English Literature II	3	0	3
LIB 202	Library Processes II	3	0	0
EDU 211	Practicum/Seminar	0	6	3
	Elective(s)			5
				17
Sixth Quarter				
LIB 203	Library Processes III	3	0	3
AUD 202	Equipment Maintenance	3	0	3
ENG 203	English Literature III	3	0	3
EDU 212	Practicum/Seminar	0	12	6
		9	12	15
		Total Credits:		96

EARLY CHILDHOOD SPECIALIST

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
PSY 103	Human Potential Seminar	2	0	2
BUS 102	Typewriting I	2	3	3
AUD 101	Audio Visual Aids	2	2	3
ART 133	Arts & Crafts	3	2	4
SOC 105	Introduction to Human Resources	2	0	2
		14	7	17
Second Quarter				
ENG 102	Freshman English II	3	0	3
PSY 101	General Psychology I	3	0	3
SOC 201	Introduction to Sociology	3	0	3
PED 110	First Aid & Safety	2	0	2
LIB 101	Introduction to Library Services	3	0	3
BUS 103	Typewriting II	2	3	3
		16	3	17
Third Quarter				
ENG 205	Report Writing	3	0	3
PSY 102	General Psychology II	3	0	3
SOC 202	Marriage and Family	3	0	3
REC 111	Social Recreation	3	0	3
EDU 110	Practicum/Seminar	0	6	3
		12	6	15
Fourth Quarter				
SPH 101	Speech I	3	0	3
PSY 201	Human Development I	3	0	3
BUS 124	Personal Finance	3	0	3
ENG 225	Children's Literature	3	0	3
EDU 210	Practicum/Seminar	0	6	3
		12	6	15
Fifth Quarter				
PSY 202	Human Development II	3	0	3
REC 201	Nature & Ourdoor Recreation	3	0	3
AUD 201	Media Production	2	3	3
PED 205	Personal Health & Comm. Hygiene	3	0	3
EDU 211	Practicum/Seminar	0	6	3
		11	9	15
Sixth Quarter				
PSY 210	The Exceptional Child	3	0	3
PSY 104	Psychology of Personal Adj.	3	0	3
AUD 202	Equipment Maintenance	3	0	3
EDU 212	Practicum/Seminar	0	12	6
	Elective			3
				18
			Total Credits:	97

RECREATION TECHNOLOGY

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
PSY 103	Human Potential Seminar	2	0	2
BUS 102	Typewriting I	2	3	3
AUD 101	Audio Visual Aids	2	2	3
ART 133	Arts & Crafts	3	2	4
SOC 105	Introduction to Human Resources	2	0	2
		14	7	17
Second Quarter				
ENG 102	Freshman English II	3	0	3
PSY 101	General Psychology I	3	0	3
SOC 201	Introduction to Sociology	3	0	3
PED 110	First Aid and Safety	2	0	2
LIB 101	Introduction to Library Services	3	0	3
BUS 103	Typewriting II	2	3	3
		16	3	17
Third Quarter				
ENG 205	Report Writing	3	0	3
SOC 202	Marriage & Family	3	0	3
PED 205	Personal Health & Community Hygiene	3	0	3
REC 111	Social Recreation	3	0	3
EDU 110	Practicum/Seminar	0	6	3
	Elective			3
				18
Fourth Quarter				
SPH 101	Speech I	3	0	3
BUS 124	Personal Finance	3	0	3
PED 206	Adaptive Physical Education	3	0	3
EDU 210	Practicum/Seminar	0	6	3
PSY 201	Human Development	3	0	3
		12	8	15
Fifth Quarter				
BUS 181M	Anatomy	3	0	3
PSY 202	Human Development	3	0	3
REC 201	Nature & Outdoor Recreation	3	0	3
AUD 201	Media Production	2	3	3
EDU 211	Practicum/Seminar	0	6	3
		11	9	15
Sixth Quarter				
AUD 202	Equipment Maintenance	3	0	3
REC 202	Water Sports & Recreation	3	0	3
EDU 212	Practicum/Seminar	0	12	6
REC 203	Recreation Administration	3	0	3
		9	12	15
		Total Credits:		97

TEACHER'S ASSISTANT

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
PSY 103	Human Potential Seminar	2	0	2
BUS 102	Typewriting I	2	3	3
AUD 101	Audio Visual Aids	2	2	3
ART 133	Arts & Crafts	3	2	4
SOC 105	Introduction to Human Resources	2	0	2
		14	7	17
Second Quarter				
ENG 102	Freshman English II	3	0	3
PSY 101	General Psychology I	3	0	3
SOC 201	Introduction to Sociology	3	0	3
PED 110	First Aid & Safety	2	0	2
LIB 101	Introduction to Library Services	3	0	3
BUS 103	Typewriting II	2	3	3
		16	3	17
Third Quarter				
ENG 205	Report Writing	3	0	3
PSY 102	General Psychology II	3	0	3
SOC 202	Marriage & Family	3	0	3
EDU 110	Practicum/Seminar	0	6	3
	Elective			3
				15
Fourth Quarter				
SPH 101	Speech I	3	0	3
PSY 201	Human Development	3	0	3
BUS 124	Personal Finance	3	0	3
ENG 225	Children's Literature	3	0	3
EDU 210	Practicum/Seminar	0	6	3
		12	6	15
Fifth Quarter				
PSY 202	Human Development	3	0	3
AUD 201	Media Production	3	0	3
PED 205	Personal Health & Comm. Hygiene	3	0	3
BUS 110	Office Machines I	2	2	3
EDU 211	Practicum/Seminar	0	6	3
		11	8	15
Sixth Quarter				
PSY 210	The Exceptional Child	3	0	3
PSY 104	Psychology of Personal Adjustment	3	0	3
AUD 202	Equipment Maintenance	3	0	3
EDU 212	Practicum/Seminar	0	12	6
	Elective			3
				18
			Total credits:	97

LAW ENFORCEMENT

(This program will be started in September, 1975)

		Lec.	Lab.	Credit
First Quarter				
ENG 101	Freshman English I	3	0	3
MAT 133	Criminal Justice Mathematics	5	0	5
CJC 101	Introduction to Criminal Justice	5	0	5
PSY 104	Psychology of Personal Adjustment	3	0	3
		16	0	16
Second Quarter				
ENG 102	Freshman English II	3	0	3
POL 201	American National Government	3	0	3
PSY 151	Human Relations	3	0	3
CJC 102	Criminology	5	0	5
CJC 115	Criminal Law	3	0	3
		17	0	17
Third Quarter				
SPH 101	Speech I	3	0	3
POL 202	State and Local Government	3	0	3
CJC 125	Due Process	5	0	5
CJC 110	Juvenile Delinquency	5	0	5
PED 110	First Aid and Safety	2	0	2
		18	0	18
Fourth Quarter				
ENG 205	Report Writing	3	0	3
CJC 212	Drugs	3	2	4
CJC 210	Criminal Investigation	5	0	5
CJC 206	Community Relations	3	0	3
CJC 216	Advanced Criminal Law	3	0	3
		17	2	18
Fifth Quarter				
CHM 101	Chemistry I	2	4	4
CJC 201	Motor Vehicle Law	3	0	3
CJC 217	Patrol Procedures	3	0	3
CJC 205	Evidence	3	0	3
	Elective			3
				16
Sixth Quarter				
CJC 211	Criminalistics	4	3	5
CJC 220	Police Organization and Administration	5	0	5
CJC 208	Crime Scenes — Collection and Preservation of Evidence	2	2	3
CJC 202	Traffic Enforcement	3	0	3
	Elective			3
				19
			Total Credits:	104

SECURITY SERVICES

(This program will be started in September, 1975)

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
MAT 133	Criminal Justice Mathematics	5	0	5
CJC 101	Introduction to Criminal Justice	5	0	5
PSY 104	Psychology of Personal Adjustment	3	0	3
		16	0	16

Second Quarter				
ENG 102	Freshman English II	3	0	3
POL 201	American National Government	3	0	3
PSY 151	Human Relations	3	0	3
CJC 102	Criminology	5	0	5
CJC 115	Criminal Law	3	0	3
		17	0	17

Third Quarter				
SPH 101	Speech I	3	0	3
POL 202	State and Local Government	3	0	3
CJC 125	Due Process	5	0	5
CJC 110	Juvenile Delinquency	5	0	5
PED 110	First Aid and Safety	2	0	2
		18	0	18

Fourth Quarter

ENG 205	Report Writing	3	0	3
CJC 212	Drugs	3	2	4
SOC 203	Social Problems	3	0	3
PSY 208	Abnormal Psychology	3	0	3
CJC 206	Community Relations	3	0	3
	Elective			3
		—	—	—
				19

Fifth Quarter

CJC 240	Security Systems	5	0	5
CJC 241	Property Control	3	0	3
CJC 242	Common Carrier Protection	3	0	3
CJC 243	Industrial Accident Investigation and Reporting	3	0	3
CJC 244	Civil and Criminal Legal Responsibility	3	0	3
		—	—	—
		17	0	17

Sixth Quarter

CJC 245	Electronic Detection & Polygraph	5	0	5
CJC 246	Security Investigation	3	0	3
CJC 247	Retail Security	3	0	3
CJC 248	Fire Prevention & Security	3	0	3
CJC 249	Surveillance Techniques	3	0	3
	Elective			3
		—	—	—
				20
			Total Credits:	107

CORRECTIONAL TECHNOLOGY

(This program will be started in September, 1975)

First Quarter		Lec.	Lab.	Credit
ENG 101	Freshman English I	3	0	3
MAT 133	Criminal Justice Mathematics	5	0	5
CJC 101	Introduction to Criminal Justice	5	0	5
PSY 104	Psychology of Personal Adjustment	3	0	3
		16	0	16

Second Quarter				
ENG 102	Freshman English II	3	0	3
POL 201	American National Government	3	0	3
PSY 151	Human Relations	3	0	3
CJC 102	Criminology	5	0	5
CJC 115	Criminal Law	3	0	3
		17	0	17

Third Quarter				
SPH 101	Speech I	3	0	3
POL 202	State and Local Government	3	0	3
CJC 125	Due Process	5	0	5
CJC 110	Juvenile Delinquency	5	0	5
PED 110	First Aid and Safety	2	0	2
		18	0	18

Fourth Quarter

ENG 205	Report Writing	3	0	3
CJC 212	Drugs	3	2	4
SOC 203	Social Problems	3	0	3
PSY 208	Abnormal Psychology	3	0	3
CJC 206	Community Relations	3	0	3
	Elective			3
		—	—	—
				19

Fifth Quarter

CJC 203	Correction	3	0	3
PSY 205	Adolescent Psychology	3	0	3
CJC 207	Confinement Facilities Administration	3	0	3
CJC 209	Correction Law	3	0	3
CJC 230	Counseling	3	0	3
CJC 234	Community-Based Corrections	3	0	3
		—	—	—
		18	0	18

Sixth Quarter

CJC 223	Correction Counseling	3	2	4
CJC 204	Paroles, Probation, & Pardons	3	0	3
CJC 224	Rehabilitation	3	0	3
CJC 250	Mental Retardation	3	0	3
CJC 221	Correction Administration	3	0	3
	Elective			3
		—	—	—
				19

Total Credits: 107

VOCATIONAL DIVISION

(Diploma)

The objectives of the vocational programs at Surry Community College are to prepare individuals for initial employment in recognized skilled occupations, to re-train for entering new occupations, to advance in a given occupation by updating or upgrading skills and knowledge, to develop an understanding of the American free enterprise system, and to develop an interest in the betterment of our society.

Vocational programs require one full year of participation for students on a full-time basis. Courses will be available during the day and during the evening for students desiring to enroll on a part-time basis.

PROGRAMS OF STUDY

The diploma is granted upon the successful completion of one of the following one-year programs:

Automotive Mechanics
Welding
Light Construction — Cooperative
Light Construction

Admission to a Program

These programs are open to any high school graduate or person 18 years of age or over who shows promise of successfully completing the program. Students with deficiencies in subjects basic to the program may be required to complete supplementary studies at the College prior to entering the program on a full-time basis.

AUTOMOTIVE MECHANICS

First Quarter		Lec.	Lab.	Credit
AUT 1111	Internal Combustion Engines	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
ENG 1101	Reading	2	0	2
PHY 1101	Applied Science I	3	2	4
		13	14	18
Second Quarter				
AUT 1112	Engine Electrical & Fuel Systems	5	12	9
ENG 1102	Communication Skills	3	0	3
DFT 1101	Schematics and Diagrams, Power Mechanics	0	3	1
PHY 1102	Applied Science II	3	2	4
		11	17	17
Third Quarter				
AUT 1123	Automotive Chassis and Suspension Systems	3	9	6
AUT 1121	Braking Systems	3	3	4
PSY 1101	Human Relations	3	0	3
AUT 1101	Automotive Air Conditioning	2	3	3
WLD 1101	Basic Gas Welding	0	3	1
		11	18	17
Fourth Quarter				
AUT 1124	Automotive Power Train Systems	3	9	6
AUT 1125	Automotive Servicing	3	9	6
BUS 1103	Small Business Operations	3	0	3
		9	18	15
		Total Credits:		67

WELDING

First Quarter		Lec.	Lab.	Credit
WLD 1120	Oxyacetylene Welding & Cutting	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
DFT 1104	Blueprint Reading: Mechanical	0	3	1
PHY 1101	Applied Science I	3	2	4
ENG 1101	Reading	2	0	2
		13	17	19
Second Quarter				
WLD 1121	Arc Welding	3	12	7
MAT 1103	Geometry	3	0	3
DFT 1117	Blueprint Reading: Welding	0	3	1
PHY 1102	Applied Science II	3	2	4
ENG 1102	Communication Skills	3	0	3
		12	17	18
Third Quarter				
WLD 1124	Pipe Welding	3	12	7
WLD 1123	Inert Gas Welding	1	3	2
WLD 1112	Mechanical Testing and Inspection	1	3	2
DFT 1119	Applied Mechanical Drawing I	1	5	3
PSY 1101	Human Relations	3	0	3
		9	23	17
Fourth Quarter				
WLD 1122	Commercial and Industrial Practices	3	9	6
WLD 1125	Certification Practices	3	6	5
MEC 1112	Machine Shop Processes	1	5	3
BUS 1105	Industrial Organizations	3	0	3
		10	20	17
		Total Credits:		71

COOPERATIVE LIGHT CONSTRUCTION

(Alternating weeks in class and on job)

This program is designed to prepare students for entry into the general construction field as tradesmen, foremen or general supervisors. Courses of study are designed to introduce the basic building skills, carpentry, masonry, cabinetmaking, and plumbing. The advanced year option offers additional studies and skill development in masonry, cabinetmaking, carpentry and residential wiring.

PROGRAM OPTIONS:

Each student has the following options.

1. Entry to the program at the beginning of any quarter.
2. Take any one quarter of study, or one single course and receive a certificate upon completion.
3. Choice of trade areas. Each student may take one quarter of four different trades or, two or more quarters of one trade if such courses are scheduled by the college. Four quarters of trade skills study and all related courses programmed are required for completion of the one-year vocational diploma program. Eight quarters are required for the advanced vocational diploma.
4. Choose cooperative work experience on an alternate week basis for hourly wages in any of the five basic building trades offered, if such an arrangement is scheduled by the college.

COOPERATIVE LIGHT CONSTRUCTION

Summer		**Lec.**	**Lab.**	**Credit**
CAR 1101-co	Carpentry Fundamentals	4	16	6
SAF 1101-co	Safety and First Aid	2	0	2
DFT 1110-co	Blueprint Reading (Building Trades)	0	3	1
On Job Training App. 200 Hours Per Quarter		0	0	10
		6	19	19

Fall

MAS 1101-co	Masonry Fundamentals	3	12	5
ENG 1101-co	Reading	2	0	2
CAR 1114-co	Building Codes	3	0	3
CAR 1102-co	Framing	1	4	2
On Job Training App. 200 Hours Per Quarter		0	0	10
		9	16	22

(Continued)

COOPERATIVE LIGHT CONSTRUCTION
(Continued)

Winter				
CAB 1101-co	Cabinetmaking I	4	16	6
MAT 1112-co	Building Trades Mathematics	3	0	3
PSY 1101-co	Human Relations	3	0	3
On Job Training App. 200 Hours Per Quarter		0	0	10
		10	16	22
Spring		**Lec.**	**Lab.**	**Credit**
PLU 1101-co	Plumbing Fundamentals	3	12	5
BUS 1103-co	Small Business Operations	3	0	3
MAT 1113-co	Construction Estimating I	3	0	3
CAR 1103-co	Trim and Finishing	1	4	2
On Job Training App. 200 Hours Per Quarter		0	0	10
		10	16	23

ADVANCED VOCATIONAL OPTION

Summer				
CAR 1104-co	Carpentry II	4	16	6
BUS 1106-co	Contracts and Specifications	1	3	1
SAF 1102-co	Safety and First Aid II	2	0	2
On Job Training App. 200 Hours Per Quarter		0	0	10
		7	19	19
Fall				
MAS 1102-co	Masonry II	3	12	5
DFT 1112-co	Blueprint Reading & Sketching	0	3	1
MAT 1114-co	Construction Estimating II	3	0	3
WLD 1101-co	Basic Gas Welding	0	3	1
On Job Training App. 200 Hours Per Quarter		0	0	10
		6	18	20
Winter				
CAB 1102-co	Cabinetmaking II	4	16	6
WLD 1102-co	Basic Arc Welding	0	3	1
CAB 1105-co	Cabinet Finishing	1	3	1
On Job Training App. 200 Hours Per Quarter		0	0	10
		5	22	18
Spring				
ELC 1124-co	Residential Wiring	5	9	5
DFT 1113-co	Blueprint Reading (Electrical)	0	3	1
MAT 1115-co	Electrical Mathematics	5	0	5
ELC 1102-co	Applied Electricity	2	3	2
On Job Training App. 200 Hours Per Quarter		0	0	10
		12	15	21

Total Credits
Without Option: 86
With Option: 164

LIGHT CONSTRUCTION

Summer		Lec.	Lab.	Credit
CAR 1101	Carpentry Fundamentals	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
PHY 1101	Applied Science	3	2	4
ENG 1101	Reading Improvement	2	0	2
DFT 1110	Blueprint Reading (Building Trades)	0	3	1
		13	17	19

Fall				
MAS 1101	Masonry Fundamentals	3	12	7
MAT 1112	Building Trades Mathematics	3	0	3
PHY 1102	Applied Science	3	2	4
ENG 1102	Communications Skills	3	0	3
SAF 1101	Safety and First Aid	2	0	2
		14	14	19

Winter				
CAB 1101	Cabinetmaking I	3	12	7
MAT 1113	Construction Estimating	3	0	3
PSY 1101	Human Relations	3	0	3
CAR 1114	Building Codes	3	0	3
		12	12	16

Spring				
PLU 1101	Plumbing Fundamentals	3	12	7
BUS 1103	Small Business Operations	3	0	3
CAR 1103	Trim and Finish	1	4	3
CAR 1102	Framing	1	4	3
		8	20	16
			Total Credits:	70

COURSES OF INSTRUCTION

COURSE NUMBERING SYSTEM

Course designations consist of a three- or four-letter prefix and a number that indicate the curriculum and the level of the course. On the same line, following the number, appear the course title, the number of the lecture and laboratory hours per week, and the number of quarter hours earned by successfully completing the course.

AGRICULTURE

AGR 104—Introduction to Agricultural Economics 3 0 3
An introduction to economics, the functions of the economic system and agriculture's role in the economy. A review of the functions of the manager and an introduction to the principles he uses in making decisions to adjust to changing conditions. Analysis of the main sources of change which affect agricultural firms.

AGR 105—Grounds Management & Equipment I 1 3 2
An introduction and study of basic grounds management techniques, equipment handling, and maintenance.

AGR 106—Grounds Management & Equipment II 1 3 2
A continuation of AGR 105, with increased emphasis placed upon laboratory and field work.

AGR 107—Grounds Management & Equipment III 1 3 2
A continuation of AGR 105, with increased emphasis on equipment maintenance and repair.

AGR 125—Animal Science 3 2 4
An introductory animal science course covering the fundamental principles of livestock production. A study of the animal body and the basic principles of reproduction, genetics, growth, fattening, digestion, along with the selection, feeding, improvement, processing and marketing of livestock.

AGR 145—Entomology 3 0 3
This course is intended to give the students a basic understanding of insects that attack ornamental plant materials. The nature, structure, and importance of identification, and control of the insects studied.

AGR 150—General Horticulture 3 2 4
A course dealing with horticulture principles and the application of plant science fundamentals to horticulture practices.
Prerequisite: AGR 170.

AGR 151—Plant Materials I 2 4 4
Introduction to the study of woody plant materials which give an overview of the woody plants grown in nurseries for landscape purposes and those found in woodlands and fields of North Carolina. Deciduous shrubs and small trees are emphasized in this course.

AGR 152—Plant Materials II 2 4 4

A continuation of AGR 151 in which additional trees and shrubs are studied; however, major emphasis is placed upon the detailed study of broad-leaved and narrow-leaved evergreens.

Prerequisite: AGR 151.

AGR 155—Arboriculture 3 2 4

Arboriculture involves the principles and practices of selection, use, establishment, and care of shade and ornamental trees. Practical applications in the course include climbing, pruning, bracing, and other physical operations required of skilled tree workers.

Prerequisite: AGR 185.

AGR 165—Plant Pathology 3 2 4

The purpose of this course is to teach the student the control of diseases of ornamental crops through a basic knowledge of structure, life history, and identification of the various parasitic disorders plaguing ornamental trees, shrubs, flowers, and turf.

AGR 170—Plant Science 3 2 4

An introductory general botany and crop science course covering the fundamental principles of the reproduction, growth, functions, and development of seed-bearing plants with application to certain commercially important plants in North Carolina.

AGR 180—General Poultry Science 3 2 4

An introduction to the science of poultry production. The major phases of the study include the history of the poultry industry; the anatomy and physiology of the chicken; the breeds and varieties; the feeding, housing, and management; marketing poultry products; and the science of disease and parasite prevention and control.

AGR 185—Soil Science and Fertilizers 3 2 4

A course dealing with basic principles of efficient classification, evaluation, and management of soils; care, cultivation, and fertilization of the soil, and conservation of soil fertility.

AGR 200 3 300 12

Internship in area of specialization supervised by instructor with 3 hours per week evening class for evaluation and planning.

AGR 201—Agricultural Chemicals 3 2 4

A study of farm chemical pesticides, their ingredients, formulation, and farm application, with emphasis on the effective and safe use of chemicals in agricultural pest control.

AGR 204—Farm Business Management 3 0 3

A review of the functions of the manager of a business firm and the problems he faces. Development of the concept of planning by both partial and complete budgeting. Review of the concepts of costs and the lengths of run in production. Practice in preparing enterprise budgets as an aid in choosing what to produce. Use of partial budgeting to find the least cost production procedure. Analysis of production data to select the level of production that yields the most net revenue. Relationship between size, efficiency, and income of a farm. Review of procedures for evaluating the efficiency of the manager. Prerequisite: AGR 104.

AGR 205—Agricultural Marketing 3 0 3

An analysis of the functions of marketing in the economy and a survey of the problems marketing faces. A review of the market including foreign markets. Problems in the operations of marketing firms including buying and selling, processing, standardization and grading, risk taking and storage, financing, efficiency, and cooperation. Discussion of procedures of marketing such commodities as grain, cotton, livestock, and tobacco.

AGR 218—Agricultural Mechanization 3 0 3

A study of farm machinery management and labor-saving devices. The economics of selection and operation of farm machinery. Study and evaluation of feed grinders and mixers, storage facilities, materials handling systems, and other labor-saving devices.

AGR 222—Agricultural Construction 3 2 4

A study of practical planning of housing systems for humans, livestock, farm commodities, and equipment storage. The design will be related specifically to layout procedures, materials of construction, structural features, and cost estimating. There will be practical exercises in preparing sketches, blueprint reading, and job planning.

AGR 228—Livestock Diseases and Parasites 3 2 4

A course dealing with the common diseases and parasites of livestock; sanitation practices and procedures with emphasis on the cause, damage, symptoms, prevention and treatment of parasites and diseases, and management factors relating to disease and parasite prevention and control.

Prerequisite: AGR 125.

AGR 251—Landscape Gardening I 3 2 4

An introduction and study of the basic principles of landscape design. Considerable emphasis is placed on the problems associated with residential site development. The course offers a section devoted to blueprint reading. Considerable laboratory time is devoted to visitations to established residential sites. The course is not oriented toward a mastery of creativity and artistry, but simply toward an understanding of certain basic principles fundamental to all landscape design endeavors.

AGR 252—Landscape Gardening II 3 2 4

Development and maintenance of landscape areas including planting, pruning, fertilization, and pest control. Fudamentals of landscape economics: costs, contracts, calculating areas, volumes, and plant quantities for landscape projects. Selection and use of materials in landscape construction.

AGR 256—Nursery & Greenhouse Management 2 4

An introductory study of nursery operations to acquaint the student with the diversity of nursery plant production, equipment, and operation detail through study of such areas as balling and burlapping pruning, fertilization, plant protection, and others. Additional emphasis is placed on the theory and practices necessary to produce profitable nursery stock.

AGR 257—Nursery & Greenhouse Management 2 4 4

A continuation of AGR 256 with increased emphasis placed on production schedules, choice and quantities of stock to be grown, as well as developing cost finding, price establishing, and record keeping for economically important nursery crops. Planning of nursery layout and facilities will also be undertaken.

Prerequisite: AGR 256.

AGR 258—Turf Grasses 1 4 3

A study of special-purpose turf grasses including identification, use, establishment, and maintenance of the specific grasses. The added laboratory time of this course permits more field trips to golf courses where each student will observe and participate in those operations required to maintain a healthy, vigorous playing surface.

Prerequisite: AGR 185.

AGR 270—Bacteriology 2 4 4

A general bacteriology course dealing with the structure, development and function of bacteria and other microorganisms. Emphasis on those organisms associated with water and soil, and the role of microorganisms in nature.

AGR 271—Field Crops 3 0 3

A study of crop species grown in southeastern United States and their place in the farm and economics programs. An application of the principles of crop production will be given for the major grain, oil, fiber, and special crops. The study will include the cultural practices, disease, and insect control, fertilization, weed control, grading and marketing of all field crops.

Prerequisite: AGR 170.

AGR 272—Tobacco Technology 3 0 3

All phases of tobacco production and marketing will be discussed. The latest research problems and findings dealing with this important cash crop will be discussed in relation to types of tobacco; the development and selection of varieties, plant production, diseases and insect control, soils fertilization, cultural practices, harvesting, curing, grading, marketing, and manufacturing as it influences cultural practices.

AGR 274—Pasture & Foliage Crops 2 4 4

A course dealing with the fundamentals of pastures and forage crops and management. A study of the major grasses and legumes of economic importance in North Carolina. Soil site relationships and plant adaptation will be stressed.

AGR 278—Weed Identification and Control 3 0 3

A study of the identification and control of the annual and perennial weeds of economic importance in North Carolina.

AGR 279—Farm Forestry 3 0 3

A course dealing with the fundamentals of forestry and farm forestry problems, including planting, protecting, thinning, and harvesting.

AGR 285—Soil Fertility 2 4 4

A course dealing with soil fertility principles, the application of these principles to the North Carolina soils, soil fertility evaluation, and soil conservation practices.

AGR 290—Soil Conservation I 2 4 4

An introduction to soil conservation, covering what is included in soil and water conservation, the public interest in soil and water conservation, who is involved in soil and water conservation, the available resources to carry out soil and water conservation measures, and the relationship of specialized knowledge in agronomy, biology, economics, engineering, soils, forestry, and recreation.

Prerequisites: AGR 170 and AGR 185.

AGR 291—Soil Conservation II 2 4 4

This includes principles of rendering assistance to conservation planning, procedures for preplanning in conservation planning, actual assistance in planning the conservation program, and actual assistance in laying out and designing conservation programs. This involves working with individual landowners on specific soil and water conservation problems and with determining correct alternatives for treatment.

AGR 292—Soil Conservation III 2 4 4

A detailed study of on-site training covering the proper servicing of conservation plans, revising plans, keeping plans current and up-to-date, maintenance of conservation measures applied to the land, and the procedure for keeping abreast of the times.

ANTHROPOLOGY

ANT 101—An Introduction to Anthropology 3 0 3

An introduction to the basic concepts of social anthropology and knowledge of one's own culture in terms of those basic concepts. The course is devoted to examining the many aspects of culture and society and, by examining the variety of ways in which man has met the conditions of life, the student may come to a broader understanding of human behavior. Comparisons between modern and primitive societies will be made so that the student can discover what aspects of human culture are universal and timeless and what are unique and variant.

ART

ART 101—Art History I 3 0 3

A general survey of art history against the background of Western culture. The periods of art from the antique through the Gothic will be studied in relation to their political, religious, and social setting.

ART 102—Art History II 3 0 3

An historical survey of the arts and artists of Europe from the Renaissance to twentieth century art and architecture.

ART 120—Commercial Art (Basic Design) 3 0 3
Basic layout of advertising art with emphasis on color, line space, and use of type.

ART 130—Introduction to Art 3 0 3
A beginner's course for those interested in learning to look at, appreciate, and enjoy the visual arts. The elements used to create a work of art are studied through discussion, reference to art works of the past and present, and actual experimentation in the various art media.

ART 131—Drawing I 3 0 3
The student is encouraged to discover an individual approach to the problems relating to expression and communication in graphic art. Areas of study include life drawing, stressing line, form and contour; landscape and city scape drawing, stressing the elements of proportion, composition and perspective. The student becomes familiar with several graphic media.

ART 132—Drawing II 3 0 3
A continuation of ART 131 emphasizing training in anatomy and life drawing. The relationship of medium to subject and historic and contemporary idioms will be analyzed.
Prerequisite: ART 131.

ART 133—Arts and Crafts 3 2 4
Provides for the acquisition of skills in the use of varied materials such as art metals, leather, plastics, papier-mache, and linoleum blocks. Designed for teacher education and religious education majors. Also valuable for hobby and leisure time activities. Laboratory periods.

ART 150, 151, 152—Ceramics 3 0 3
This course concentrates on ceramic pottery and sculpture with a small amount of wheel throwing and a large amount of hand building in clay. Glazing, firing, and armature construction will be emphasized.

ART 160, 161, 162—Printmaking 3 0 3
In this course the emphasis will be on artistic application of relief printing such as woodcuts, blockprinting, and monoprints in multicolor and black and white. A beginning knowledge of silk screen will also be included.

ART 201—Painting I 3 0 3
A beginner's course in oil painting. Composition and color values are stressed. Subject matter: still-life and figure. The student is introduced to technical problems such as color mixing, use of palette, use of color wheel, and brush techniques. Composition and color theory are an integral part of this course.

ART 202—Painting II 3 0 3
A continuation of ART 201. Use of full color palette, nonobjective composition, still-life, and figure painting. Continual emphasis upon composition and color theory.

ART 203—Painting III 3 0 3
A continuation of ART 202. Landscape painting, figure painting, still-life, color, values, and composition are stressed.

ART 204—Painting: Water Color 3 0 3
Water color: transparent water color used for still-life, flowers, and landscape compositions. Field trips offer opportunities to paint local mountain scenery.

The following courses provide for an acquisition of skills in various crafts. They are designed for teacher education and religious education majors. They are also valuable for hobby and leisure-time activities.

ART 134—Ceramics	0	2	1
ART 135—Decoupage I	0	2	1
ART 136—Decoupage II	0	2	1
ART 137—Flower Arrangement	0	2	1
ART 138—Art Metal	0	2	1
ART 139—Leather Craft	0	2	1
ART 140—Crafts	0	2	1
ART 141—Wood Carving	0	2	1
ART 142—Oil Painting	0	2	1

AUDIO VISUAL

AUD 101—Audio-Visual Aids 2 2 3
An introduction to non-print media, equipment operation, and effect of A-V materials on the learning process.

AUD 201—Media Production 2 3 3
Slides, transparencies, tapes, dry mount materials, and video tapes will be studied and produced.

AUD 202—Equipment Maintenance 3 0 3
To provide skills necessary for maintenance of equipment. Emphasis is on preventing need for extensive maintenance.

AUTOMOTIVE

AUT 101—The Automobile 2 2 3
An introductory course designed to acquaint the automobile owner with the operation and function of the various automobile systems and components. Topics of discussion will include engines, power trains, chassis and suspension, braking systems, air conditioning and electrical and fuel systems.

AUT 1101—Automotive Air Conditioning 2 3 3

General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of operation, and control; proper handling of refrigerants in charging the system.

AUT 1111—Internal Combustion Engine 3 12 7

Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cam and camshafts, fuel and exhaust system, cooling systems, proper lubrication; and methods of testing, diagnosing and repairing.

AUT 1112—Engine Electrical and Fuel Systems 5 12 9

A thorough study of the electrical and fuel systems of the automobile. Battery cranking mechanism, generator, ignition, accessories and wiring, fuel pumps, carburetors, and fuel injectors. Characteristics of fuels, types of fuel systems, special tools, and testing equipment for the fuel and electrical system.

AUT 1121—Braking Systems 3 3 4

A complete study of various braking systems employed on automobiles and lightweight trucks. Emphasis is placed on how they operate, proper adjustment, and repair.

Prerequisite: PHY 1102.

AUT 1123—Automotive Chassis and Suspension Systems 3 9 6

Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of suspension and steering systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, and front end alignment.

AUT 1124—Automotive Power Train Systems 3 9 6

Principles and functions of the automotive power train systems; clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair.

AUT 1125—Automotive Servicing 3 9 6

Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Troubleshooting of automotive systems, providing a full range of experiences in testing, adjusting, repairing, and replacing.

Prerequisite: AUT 1123, 1121, 1101.

BIOLOGY

BIO 101—General Biology 3 3 4

This course is designed to familiarize the student with the basic principles, problems, and similarities of living organisms. Emphasis is placed upon the chemical and morphological basis of life.

BIO 102—General Biology II 3 3 4

This course will acquaint the student with the perpetuation of life, development of the organism, and the formation of organism populations and communities.

Prerequisite: BIO 101.

BIO 103—General Biology III 3 3 4

An application of the principles acquired in BIO 101 and 102 will be utilized to give the student an appreciation of the origin and diversity of life in the plant and animal kingdoms.

Prerequisites: BIO 101, 102.

BIO 104, 105—Anatomy and Physiology 3 3 4

A basic course of the structure and function of the human body as related to nursing training. The body as an integrated whole, the moving body, body control, maintaining the metabolism of the body, reproduction, and control of body functions are the major topics of instruction. The laboratory sessions are correlated with the material in the lecture sessions to give the student practical experience in the basic phases of the course.

BIO 106—Microbiology 3 3 4

A study of microbiology as related to health occupations. Course includes study of pathogenic microorganisms: bacteria, fungi, viruses, rickettsia and animal parasites.

BIO 111—Nutrition 3 0 3

A study of the essentials of an adequate diet. Topics considered are energy, protein, mineral and vitamin requirements, metabolism, deficiencies in the diet and their effects, and diet in relation to age and physical condition.

BIO 201—Local Flora 3 4 5

A field and laboratory study of local flora concerned with their classification, identification, and ecology by the use of keys and field studies.

Prerequisites: BIO 101, 102, 103.

BIO 202—Invertebrate Zoology 3 3 4

An advanced study of taxonomy, morphology, physiology, and the development of invertebrates stressing the major phyla.

Prerequisites: BIO 101, 102, 103.

BIO 203—Comparative Vertebrate Anatomy 3 4 5

An anatomical study of representative vertebrates including considerations of their morphology, physiology, ecology, and evolution.

Prerequisites: BIO 101, 102, 103.

BUSINESS

BUS 080—Remedial Math 0 5 0

An individualized, self-paced course designed to meet the entering math requirements for general business management, retailing, and secretarial curricula. Emphasis is given to operations involving whole numbers, fractions, decimals, percentages, and analyzing and solving written problems. This course is a review of the fundamental skills necessary in the study of business math.

BUS 101—Introduction to Business 3 0 3

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organizations, and management.

BUS 102—Typewriting I 2 3 3

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

BUS 103—Typewriting II 2 3 3

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscripts, correspondence, and business forms.

Prerequisite: BUS 102 or the equivalent. Speed requirement—30 words per minute for five minutes.

BUS 104—Typewriting III 2 3 3

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms.

Prerequisite: BUS 103 or the equivalent. Speed requirement—40 words per minute for five minutes.

BUS 105—Business Math 5 0 5

This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business.

BUS 106—Shorthand I 3 2 4

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.

BUS 107—Shorthand II 3 2 4

Continued study of theory with greater emphasis on dictation and elementary transcription.

Prerequisite: BUS 106 or the equivalent.

BUS 108—Shorthand III 3 2 4

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.

Prerequisite: BUS 107.

BUS 110—Office Machines I 2 2 3

A general survey of business and office machines. Students will receive training in techniques, processes, operation, and application of the ten-key adding machines, full keyboard machines, and calculators.

BUS 111—Office Machines II 2 2 3

Introduction to the operation of the machines used in a business office.

Prerequisite: BUS 110.

BUS 115—Business Law I 3 0 3

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.

BUS 116—Business Law II 3 0 3

Includes the study of laws pertaining to bailments, sales, riskbearing, partnership-corporation, mortgages, and property rights.

Prerequisite: BUS 115

BUS 117—Business Law III 3 0 3

Continuation of business law stressing guaranty and suretyship, insurance, landlord and tenant liens, wills, trust and bankruptcy, and transportation.

Prerequisite: BUS 116.

BUS 118—Machine Transcription I 2 3 3

Designed to develop skill in operating a transcription unit, to equip students with knowledge of many kinds of business documents so that they understand the use of such documents and enable them to apply their knowledge skillfully, to build a fundamental knowledge of business vocabulary as well as the rules of grammar, punctuation, and spelling, and to develop understanding of secretarial procedures and responsibilities in business.

BUS 119—Machine Transcription II 2 3 3

A continuation of the objectives and skills in BUS 118.

BUS 123—Business Finance 3 0 3

Financing of business units, as individuals, partnerships, corporations, and trusts. A detailed study is made of short-term, long-term, and consumer financing.

BUS 124—Personal Finance 3 0 3

Studies the problems affecting individuals in budgeting, borrowing, and investing. In addition, the problems of insurance, income and personal property taxes, housing costs, retirement, and wills are approached from the viewpoint of the consumer.

BUS 125—Elements of Economics I 3 0 3

A basic study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual firm and to society at large.

BUS 126—Elements of Economics II 3 0 3

A continuation of BUS 125 providing for a greater depth into the law of supply and demand, its practical applications in relation to the behavior of the firm, the behavior of the consumer, and current economic issues.

Prerequisite: BUS 125.

BUS 130—Cooperative Work Study 1 4 3

This course consists of 48 hours of approved on-the-job work experience to initiate the student to the retail environment. Individual arrangements regarding hours and time of work will be approved by the program coordinator. Each student will make a written report on a practical project related to his work experience. The employer and type of work experience will be approved by the program coordinator.

BUS 131—Principles of Accounting I 2 3 3
A study of the procedures of accounting and theory underlying those procedures. Introduction to double entry accounting.

BUS 132—Principles of Accounting II 2 3 3
A continuation of accounting theory developed in BUS 131 with concentration on single proprietorship and partnerships through the use of balance sheets, income statements, and other accounting forms.
Prerequisites: BUS 131.

BUS 133—Principles of Accounting III 2 3 3
A study of accounting as applicable to corporations with a comparison between accounting records as they differ between privately owned and corporately owned enterprises.
Prerequisite: BUS 132.

BUS 141, 142, 143—Machine Shorthand I, II, III 5 4 6
The basic theory and principles of machine shorthand, including brief forms and fundamentals of phrasing. The student will learn abbreviations and phrases and develop reading and writing techniques which will enable him to take dictation rapidly.

BUS 152—Industrial Organizations 3 0 3
See BUS 1105—Industrial Organizations.

BUS 173—Retailing I 3 0 3
A study of the role of retailing in the economy, including the development of the present retail structure, functions performed, principles governing affective operation, and managerical problems resulting from current economic and social trends.

BUS 180M—Medical Terminology & Vocabulary 3 0 3
To develop an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business, technical, and professional offices.

BUS 181M—Anatomy for the Medical Secretary 3 0 3
A study of the normal functions of the human body and its systems with emphasis upon the interrelated functions of various parts and systematic processes in the development of basic physiological principles.

BUS 190L—Legal Terminology & Vocabulary 3 0 3
Legal terms and their definitions are introduced to enhance the vocabulary of legal secretarial students. Special emphasis on accurate spelling and transcription, as well as accurate oral and written usage of new terms.

BUS 200—Machine Shorthand IV 5 4 6
The student practices daily for speed development, making every effort to attain high speeds without sacrificing accuracy. Dictation from outside sources as well as a speed building text will be introduced. Speed dictation tapes will also be used, and transcription of notes at the typewriter will be required.

BUS 201, 202—Machine Shorthand V, VI 5 4 6

The student takes and transcribes material found in general correspondence, legal documents, and taped dictation. These courses are taken concurrently with BUS 240 and 242, and students will be asked to read and transcribe at the typewriter those notes taken for these courses.

BUS 205—Advanced Typewriting 2 3 3

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation, and the typing of reports, manuscripts, and legal documents.

Speed requirement—40 words per minute for 5 minutes.

BUS 206E, 206M, or 206L—Dictation and Transcription 3 2 4

Develops the skill of taking dictation and of transcribing at the typewriter, materials appropriate to the course of study, which includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed.

BUS 207—Dictation and Transcription 3 2 4

Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the stenographic requirements of business and professional offices.

BUS 208—Dictation and Transcription 3 2 4

Principally a speed building course, covering materials appropriate to the course of study, with emphasis as well on accuracy.

Prerequisite: BUS 207

BUS 209—Production Typewriting 2 3 3

Printed business forms are used to develop accuracy and speed. Designed as a pre-employment review of typing techniques.

BUS 210—Filing 3 0 3

Filing covers what records to keep, how to store them, how to find them quickly when needed, and how to apply the criteria for determining their disposition or retention. Included are rules for alphabetic indexing, procedures for the operation and control of filing methods and systems; principles for the selection of records equipment and supplies.

BUS 211—Stenoprint 2 2 4

Students receive training in the techniques, operation, and application of a Stenoprint machine.

BUS 214—Secretarial Procedures 3 2 4

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims.

BUS 215—Office Application 3 12 6
During the sixth quarter only, students are assigned to work in a business, technical, or professional office for 12 hours a week. The objective is to provide actual work experience for secretarial students and an opportunity for the practical application of the skills and knowledge previously learned according to the course of study.
Prerequisites: BUS 214, BUS 205, BUS 207.

BUS 218—Machine Transcription III 2 3 3
This course is developed to teach more efficient operation of transcribing equipment and good transcribing techniques. It includes further training in the fundamentals of spelling, grammar, and punctuation, and acquaints the student with business terminology and the various kinds of business communications.

BUS 219—Machine Transcription IV 2 3 3
A continuation of BUS 218.

BUS 221—Credit Procedures 3 0 3
The principles and practices in the extension of credit; collection procedures; laws pertaining to credit extension; and collection are included.

BUS 229—Taxes 3 0 3
Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise, and inheritance.
Prerequisite: BUS 131.

BUS 230—Retail Applications 2 8 7
During the sixth quarter, students are assigned to work in a retail establishment for 8 hours a week. The objective is to provide actual work experience whereby application of the skills and knowledge previously learned can be applied.

BUS 232—Sales Development 3 0 3
A study of retail, wholesale, and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for an execution of sales demonstrations required.

BUS 235—Business Management 3 0 3
Principles of business management including overview of major functions of management, such as planning, staffing, controlling, directing, and financing. Clarification of the decision-making function. Role of management in business-qualification and requirements.

BUS 236—Intermediate Accounting I 2 3 3
Concepts and principles underlying accounting processes. Theory and problems of financial accounting; analysis of accounts in balance sheets, income and retained earnings statements. Theory of valuations procedures emphasized.
Prerequisite: BUS 133

BUS 237—Intermediate Accounting II 2 3 3
Analysis of financial statements, including the preparation of flow of funds statements, use of comparative data, statements of incomplete records and ratio analysis.
Prerequisite: BUS 236.

BUS 238—Auditing 2 3 3

An introduction to auditing theory and practice covering audits as conducted by independent public accountants. Included are auditing standards, procedures, professional ethics, and review and evaluation.

Prerequisite: BUS 237.

BUS 239—Marketing 3 0 3

A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing processes.

BUS 240—Court Reporting I 0 10 5

Utilizing machine shorthand skills, the student records all types of court proceedings in the local District and Superior Courts, learns to keep his records, and files his notes. He strives daily for perfect notes and more speed. (Taken concurrently with BUS 201.)

BUS 241—Sales Promotion and Management 2 2 3

The scope and activities of sales promotion with emphasis on the coordination of advertising, display, special events, and publicity. External and internal methods of promoting business: budgeting, planning, and implementing the plan.

BUS 242—Court Reporting II 0 10 5

The student uses his machine shorthand skills to record actual court cases, conferences, and/or conventions. He maintains records of the proceedings and transcribes periodically. He strives for high speeds and accuracy. (Taken concurrently with BUS 202.)

BUS 243—Advertising 3 0 3

The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals; product and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media.

BUS 249—Buying and Merchandising I 3 0 3

Analyzes the organization for buying — what, when, and how to buy. Topics include psychology of dealing with people, vendor relations, and planning merchandise assortment.

BUS 250—Buying and Merchandising II 3 0 3

Principles of effective inventory and stock control to include storage control, merchandise rotation, accountability, and pricing.

Prerequisite: BUS 249.

BUS 251, 252, 253—Cost Accounting I, II, II 2 3 3

This course is designed to develop the principles used in accounting to aid management in their planning, controlling, and analyzing of cost data. The areas studied include budgets, job and process costing, estimates and standard costing, direct costing, and break-even analysis.

Prerequisite: BUS 133.

BUS 260—Commercial Design and Display I 2 3 3

An introduction to basic layouts and design of commercial displays. Source and related texts discussing such design as needed by retail stores, banks, restaurants, motels, and various offices, specifying equipment and fixtures required.

BUS 262—Fashion in Retailing **2 2 3**
This course acquaints the student with the relationships between fashion and style. Topics included are characteristics of styles, fashion trends, coordination, application of color, and design analysis.

BUS 271—Office Management **3 0 3**
Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems.

BUS 272—Principles of Supervision **3 0 3**
Introduction to the basic responsibilities and duties of the supervisor and his relationship to supervisors, subordinates, and associates. Emphasis on securing an effective work force and the role of the supervisor. Methods of supervision are stressed.

BUS 273—Retailing II 3 0 3
This course is designed to help students understand retailing from the viewpoint of the owner or manager. Topics studied: organization of the retail firm, establishment of stores, customer needs, purchasing and financing, advertising and selling, planning and control.

BUS 274—Personnel Management **3 0 3**
The techniques of supervising and coordinating the work of others. Among the items covered are employment interview techniques, training procedures, supervision of employees, delegating authority and responsibility factors influencing employees' morale, job studies and descriptions, current policies on labor-management relations and labor legislation affecting business workers.

BUS 275—Principles of Insurance **3 0 3**
Types and provisions of life, property, and casualty insurance from the point of view of an individual and business enterprise.

BUS 280M—Medical Terminology and Vocabulary 3 0 3
Greater emphasis on an understanding of the terminology and vocabulary appropriate to the course of study as it is used in business.
Prerequisite: BUS 180M.

BUS 281M—Anatomy for the Medical Secretary 3 0 3
A continuation of BUS 181M.
Prerequisite: BUS 181M.

BUS 1103—Small Business Operations **3 0 3**

BUS 1103-co **3 0 3**
An introduction to the business world, problems of small business operations, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations.

BUS 1105—Industrial Organizations **3 0 3**
Methods, techniques, and practices of modern management in planning, organizing and controlling operations of a manufacturing concern. Introduction of the competitive system and the factors constituting product cost.

BUS 1106-co—Contracts and Specifications 1 3 1

A study of building codes and their effect in relation to specifications and contract drawings. The purpose and writing of specifications will be studied along with their legal and practical application to working drawings.

Contract documents will be analyzed and studied for the purpose of client and architect.

CARPENTRY

CAB 1101—Cabinetmaking I 3 12 7

CAB 1101-co 4 16 6

General cabinetmaking and millwork for building construction. Practical applications will include measuring, layout, and construction of various types of cabinets and trim.

CAB 1102-co—Cabinetmaking II 4 16 6

A continuation of Cabinetmaking I with emphasis placed on advanced machining techniques, jointery, and surface preparation.

CAB 1105-co—Cabinet Finishing 1 3 1

Topics of study will include methods and practices of modern cabinet and furniture finishing.

CAR 101—Introduction to Woodworking I 1 4 3

An introductory course in the care and use of woodworking tools, machinery, and basic woodworking.

CAR 1101—Carpentry Fundamentals 3 12 7

CAR 1101-co 4 16 6

An introduction to carpentry as a vocation; basic knowledge and skills in hand and power tools; laboratory experience in layout for excavation and footings, introduction to wall, ceiling, and roof structures.

CAR 1102—Framing 1 4 3

CAR 1102-co 1 4 2

Course content includes laboratory experience in form construction, floor sills, girders, posts, and joists; wall framing for doors and windows; roof rafters, dormers, and porches.

CAR 1103—Carpentry Trim and Finish 1 4 3

CAR 1103-co 1 4 2

Course content includes the study of trim and finishing the inside and outside of buildings. A study of using a variety of woods and materials is included.

CAR 1104-co—Carpentry II 4 16 6

A continuation of Carpentry I. Topics of study will include all facets of the residential structure as completed by the carpenter. Each student will study materials, tools and additional work in framing, finishing, and roof construction.

Prerequisite: CAR 1101, 1102, 1103

CAR 1114—Building Codes 3 0 3

CAR 1114-co 3 0 3

A study is made of building codes and the minimum requirements for local, county and state construction regulations, involving safety, sanitation, mechanical equipment and materials.

CHEMISTRY

CHM 101—General Chemistry I 3 3 4

A course providing instruction in language of chemistry; fundamental chemistry laws and theories, preparation and properties of elements and their compounds.

CHM 102—General Chemistry II 3 3 4

A continuation of CHM 101 to include the following concepts: chemical change, kinetic-molecular theory and atomic structure compound formation. Emphasis is placed on the mastery of formula and equation writing and of chemical calculations.

CHM 103—General Chemistry III 3 3 4

A continuation of CHM 102 with emphasis placed on gas laws, calculation of formulas, weight and volume relationships, equivalent weight, standard solutions, chemical equilibrium, redox and electro chemistry. Introduction to organic and nuclear chemistry.

CHM 111—Chemistry 2 2 3

Basic principles of organic, inorganic, and bio-chemistry are studied as they are related to practice in health occupations.

CHM 201—Qualitative Analysis 3 3 4

A course which extends the study of chemical principles to include equilibria of slightly soluble salts and of complex tons and systematic analysis. Laboratory consists of the qualitative analysis of both principles and techniques of separation and identification of inorganic cations and anions.

Prerequisite: CHM 103 or permission of instructor.

CHM 204, 205, 206—Organic Chemistry I, II, III 3 3 4

A year's course in the fundamentals of organic chemistry. The structure, physical properties, synthesis and typical reactions of the various series of aliphatic, alicyclic, and aromatic compounds are studied with attention to reaction mechanisms. In the laboratory representative carbon compounds are synthesized with emphasis on basic laboratory techniques.

Prerequisites: CHM 101, 102, 103.

CRIMINAL JUSTICE

CJC 101—Introduction to Criminal Justice 5 0 5

This course is designed to familiarize the student with a philosophy and history of law enforcement, its legal limitations in our society, the primary duties and responsibilities of the various agencies in the criminal justice field, basic processes of justice, an evaluation of law enforcement's current position, and an orientation relative to the profession as a career.

CJC 102—Criminology 5 0 5

A general course designed to introduce the student to the causation of crime and delinquency. The historical and contemporary aspects of crime, law enforcement, punishment, and correctional administration will be discussed.

CJC 110—Juvenile Delinquency 5 0 5

General survey of juvenile delinquency as an individual and social problem, theories of delinquency, causation, and methods of correction and prevention. The course will present a general overview of the juvenile court.

CJC 115—Criminal Law 3 0 3

A course designed to present a basic concept of criminal laws and to provide a legal groundwork for those who seek to enter the criminal justice field.

CJC 125—Due Process 5 0 5

This course is designed to provide the student with a review of court systems; procedures from incident to final disposition; principles of constitutional, federal, state, and civil laws as they apply to and affect law enforcement.

CJC 201—Motor Vehicle Law 3 0 3

A study of the traffic enforcement codes with primary emphasis placed on North Carolina law as it relates to motor vehicles.

CJC 202—Traffic Enforcement 3 0 3

A study which covers the history of the traffic enforcement problems and gives an overview of the problem as it exists today. Attention will be given to the three E's (enforcement, evaluation, effectiveness) and legislation, the organization of the traffic unit, the responsibilities to the traffic function of the various units within the law enforcement agency, enforcement tactics, evaluation of the traffic program effectiveness and the allocation of men and materials. Accident investigation is stressed.

CJC 203—Correction 3 0 3

An examination of the total correctional process from law enforcement through the administration of justice, probation, prisons and correctional institutions, and parole. This course will provide a history and philosophy in the field of correction.

CJC 204—Paroles, Probation, and Pardons 3 0 3

Probation as a judicial process and parole as an executive function are examined as community-based correctional programs and the use of pardons is reviewed.

CJC 205—Evidence 3 0 3

Instruction covers the kinds and degrees of evidence and the rules governing the admissibility of evidence in court.

CJC 206—Community Relations 3 0 3

This course will provide the student with an understanding of community structures as they relate to minority groups, peer groups, socioeconomic groups, leader groups, and group relations. Emphasis will be placed on the organization and function of these groups as they relate to the profession of criminal justice-protective service.

CJC 207—Confinement Facilities Administration 3 0 3

This course is designed to familiarize the student with the supervision and administration of confinement facilities involving techniques of inmate supervision, security, medical care of prisoners, food preparation, sanitation, and various legal aspects controlling detention facilities, correctional institutions, and jails.

CJC 208—Crime Scene—Collection and Preservation of Evidence 2 2 3

This course is designed to familiarize the student with the importance of identifying types of evidence at a crime scene, to teach him to properly mark the evidence, and how to establish a legal chain of evidence. The student is instructed in the various ways of preserving and packaging evidence for shipment to a crime lab.

CJC 209—Correction Law 3 0 3

This course is designed to familiarize the student with the specific laws as they pertain to correction, care, custody, and control.

CJC 210—Criminal Investigation 5 0 5

This course introduces the student to fundamentals of investigation; crime scene search; recording, collection, and preservation of evidence; sources of information; interview and interrogation, case preparation, and court presentation.

CJC 211—Criminalistics 4 3 5

An introduction to the forensic aspects of police science. The subject matter concentrates on the procedures to be undertaken in the crime lab. Emphasis is placed on fulfilling all legal requirements regarding the handling and evaluation of physical evidence. All students participate in a crime scene and the investigation of all evidence pertaining to the crime.

CJC 212—Drugs 3 2 4

This course is designed to prepare the student to identify and classify drugs. Emphasis will be placed on the investigation techniques and effects of drugs on the human body as they relate to a profession in criminal justice-protective service.

CJC 216—Advanced Criminal Law 3 0 3

A continuation of Criminal Law I which presents a basic concept of criminal law and creates an appreciation of the rules under which one lives in our system of government. Primary emphasis will be placed on North Carolina law.

Prerequisite: CJC 115.

CJC 217—Patrol Procedures 3 0 3

This course defines the purposes of patrols and describes the types of patrols. It explains the operation of police vehicles on patrol, answering calls—emergency and non-emergency and felony in progress. It provides the student the opportunity to develop powers of perception, and observation concerning persons, places, and things. Safe driving techniques and uses of equipment are presented.

CJC 220—Police Organization & Administration 5 0 5
Introduction to principles of organization and administration, discussion of the service functions, e.g., personnel management, police management, training, communications, records, property maintenance, and miscellaneous services.

CJC 221—Correction Administration 3 0 3
Emphasis is placed on the principals of administration in the correctional setting including budgeting and financial control, recruitment and development of staff, administrative decision making, public relation, and other correctional administrative functions.

CJC 223—Correction Counseling 3 2 4
This course is designed to provide the student with information pertaining to counseling techniques as they apply to the needs of a correction officer. Time is provided for role playing and other practical techniques.

CJC 224—Rehabilitation 3 0 3
This course is designed to provide the student with the opportunity to explore the different avenues of rehabilitation. The new and innovative techniques of rehabilitation will be emphasized as they relate to successful methods.

CJC 230—Counseling 3 0 3
This course is designed to present the basic elements of counseling. The basic elements will be applied to the different socioeconomic groups in our society.

CJC 234—Community-Based Correction 3 0 3
Community resources that can be utilized in the correctional process are examined—such as vocational rehabilitation, alcohol detoxification and other units, welfare services, child guidance and mental health clinics, employment services, private volunteer, professional assistance, legal aid, and other pertinent services.

CJC 240—Security Systems 5 0 5
This course is designed to introduce the student to an overview of the total security concept. The topic is broken down into industrial, commercial, and retail security.

CJC 241—Property Control 3 0 3
This course is designed to provide the student with an understanding of the physical layouts and control procedures of industrial, commercial, and retail facilities. Methods of protection such as electrical gates, magnetic passes, perimeter lighting, alarm systems, fencing, and other means of protection are covered.

CJC 242—Common Carrier Protection 3 0 3
This course is designed to provide the student with an understanding of various common carrier functions. Effective control measures such as bills of lading, waybills, notices of shipment, and free astray forms are presented as they relate to the security officer's function. ICC regulations as they relate to company policies and state laws are covered.

CJC 243—Industrial Accident Investigation and Reporting 3 0 3

This course is designed to present techniques and procedures that will enable the security officer to adequately investigate an industrial accident and report relevant facts important to the investigation. Familiarization with pertinent phraseology and terms is stressed.

CJC 244—Civil and Criminal Legal Responsibility 3 0 3

This course emphasizes the civil and criminal legal responsibility of security personnel. It involves control and supervision of company property including entries and exits. It stresses the legal liability of the individual and of the company.

CJC 245—Electronic Detection and Polygraph 5 0 5

This course is designed to provide the student with an understanding of electronic detection devices and equipment. It stresses the legal aspects limiting their use. The use of the polygraph as an investigative aid is covered.

CJC 246—Security Investigation 3 0 3

This course is designed to familiarize the student with utilization of personnel security questionnaires and other sources of background data to assure complete investigations. Familiarization with investigative techniques and procedures are emphasized.

CJC 247—Retail Security 3 0 3

This course is designed to familiarize the student with information concerning all aspects of retail security protection. Internal safeguards including employee and customer activities are covered.

CJC 248—Fire Prevention And Security 3 0 3

This course presents information of the different types of fires and their prevention. Types of fire extinguishers and fire alarms are presented. Methods of organizing and training fire brigades are stressed.

CJC 249—Surveillance Techniques 3 0 3

This course is designed to cover all types of surveillance techniques and the use of surveillance equipment. Emphasis is placed on loss prevention in relation to employee and customer activities in industrial, commercial, and retail settings.

CJC 250—Mental Retardation 3 0 3

This course is designed to provide the student with the opportunity to acquire an understanding of the mentally retarded person in terms of the individual's behavior as it relates to confinement.

DATA PROCESSING

EDP 104—Introduction to Data Processing 3 0 3

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detailed study of particular computer problems. This course is a prerequisite for all programming courses.

DRAFTING

DFT 101—Technical Drafting I 1 5 3

The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced.

DFT 102—Technical Drafting II 1 5 3

Application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, and sections and conventions will be studied. Most important is the introduction of the graphical analysis of space problems. Problems of practical design elements shall be studied. Dimensioning practices for "details" and "working drawing," approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects.

Prerequisite: DFT 101.

DFT 103—Technical Drafting III 1 5 3

Intersection and developments and their practical solutions, where applicable, model solutions accompany the problems. The various techniques employed to produce and render isometric and oblique drawings, isometric, dimetric, and trimetric projections will be included.

Prerequisite: DFT 102.

DFT 104—Electronics Drafting 2 3 3

A continuation of skills and techniques in DFT 101 with special emphasis on electronic schematic diagrams and electronic circuit design.

DFT 105—Introduction to Drafting: Architectural 3 0 3

An introductory course designed to acquaint the student with fundamentals of residential planning. Studies will include design factors, basic floor plans, elevation views, and scale drawings.

DFT 106—Architectural Drafting I 2 4 4

An introduction to fundamental architectural drawing. Topics of study will include architect's scale, symbols, dimensioning, floor plans, sectional views, and elevations of residential buildings.

DFT 107—Architectural Drafting II 2 4 4

A continuation of DFT 106. Further study of residential buildings with an introduction to industrial building. Projects completed in this two-course sequence will include producing the working drawings for a small residence and/or a small industrial plant.

DFT 161, 162—Applied Mechanical Drawing I & II 1 4 3

See DFT 1119 and 1120—Applied Mechanical Drawing I & II

DFT 164, 165—Blueprint Reading: Mechanical 1 2 2
See DFT 1104 and 1105, Blueprint Reading: Mechanical.

DFT 201—Technical Drafting IV 2 6 4
Applications and constructions of charts, graphs, and nomographs in engineering and technical data. Screw threads, springs, keys, rivets, piping and welding symbols, methods of representing and specifying will be covered. Basic mechanisms of motion transfer, gears and cams, will be studied and drawn with emphasis on methods of specifying, calculating, dimensions, and dilineating.
Prerequisite: DFT 103.

DFT 204—Descriptive Geometry 2 4 4
Graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems will be stressed with analytical verification where applicable. Visualization shall be stressed on every problem.
Prerequisite: DFT 102.

DFT 205—Design Drafting I 2 6 4
Basic design is introduced in the study of motion transfer mechanisms as they relate to power trains. Principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings and simplified drafting practices constitute areas of study. Types and methods of specifying materials and workmanship are an integral part of the course.
Prerequisites: DFT 204, MAT 102, PHY 102.

DFT 206—Design Drafting II 2 6 4
Research to solve a problem in design by consulting various manuals, periodicals, and through laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly and sub-assembly drawings, pictorial drawings, exploded pictorial assembly, patent drawings and specifications are required as part of the problem.
Prerequisite: DFT 205.

DFT 211—Mechanisms 3 2 4
Mathematics and drafting room solutions of problems involving the principles and machine elements. Study of motion linkages, velocities and acceleration of points within a link mechanism; layout methods for designing cams, belts, pulleys, gears, and gear trains.
Prerequisites: DFT 201 and 204, MAT 103, PHY 106.

DFT 212—Jig and Fixture Design 2 4 4
Commercial standards, principles, practices, and tools of jig and fixture design. Individual project and design work to acquaint students with the types of jigs and fixtures and their design.
Prerequisites: DFT 205, DFT 211.

DFT 1101—Schematics and Diagrams: Power Mechanics 0 3 1

Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.

DFT 1104—Blueprint Reading: Mechanical 0 3 1

Interpretation and reading of blueprints. Information on the basic principles of blueprint; lines, views, dimensioning procedures and notes.

DFT 1105—Blueprint Reading: Mechanical 0 3 1

Further practice in interpretation of blueprints as they are used in industry; study of prints supplied by industry; making plans of operations; introduction to drafting room procedures; sketching as a means of communications.

Prerequisite: DFT 1104

DFT 1110—Blueprint Reading: Building Trades 0 3 1
DFT 1110-co 0 3 1

Principles of interpreting blueprints and trade specifications common to the building trades. Development of proficiency in making three view and pictorial sketches.

DFT 1112-co—Blueprint Reading and Sketching 0 3 1

Designed to develop abilities in reading complex drawings in the masonry field. Blueprints of residential and commercial buildings will be studied with emphasis on the plot plan, floor plan, basement and/or foundation plan, walls and various detailing drawings of masonry work.

DFT 1113—Blueprint Reading: Electrical 0 3 1

DFT 1113-co 0 3 1

Interpretation of schematics, diagrams and blueprints applicable to electrical installations with emphasis on electrical plans for domestic and commercial buildings. Sketching schematics, diagrams, and electrical plans for electrical installations using appropriate symbols and notes according to the applicable codes will be a part of this course.

DFT 1117—Blueprint Reading: Welding 0 3 1

A thorough study of trade drawing in which welding procedures are indicated. Interpretation, use and application of welding symbols, abbreviations, and specifications.

Prerequisite: DFT 1104.

DFT 1119—Applied Mechanical Drawing I 1 5 3

DFT 1119 and DFT 1120 constitute a series in mechanical drawing designed primarily for students enrolled in various vocational programs involving the production and/or interpretation of basic working drawings.

DFT 1119 is basically an introduction to mechanical drawing with emphasis on the following topics of study: drafting equipment, geometric constructions, sketching techniques and instrument drawings of orthographic, sectional, job planning, and pictorial views. Standard practices of dimensioning basic machine parts will culminate this course.

DFT 1120—Applied Mechanical Drawing II 1 5 3

Continuation of study and practice in mechanical drawing. Basic studies will include detail dimensioning, tolerancing, auxiliary views, working drawings, and the reproduction of drawings.

EDUCATION

EDU 110—Practicum/Seminar 0 6 3

Students are placed in field of interest. Work is supervised by coordinator. Some of this time may be used in campus seminars with faculty and specialists in various educational fields.

EDU 201, 202—Introduction to Education 3 0 3

A course designed to acquaint the prospective teacher with four major aspects of education: the teaching profession, the school system, the teacher, and the pupil. Two quarters.

EDU 210—Practicum/Seminar 0 6 3

Students are placed in field of interest. Work is supervised by coordinator. Some of this time may be used in campus seminars with faculty and specialists in various educational fields.

EDU 211—Practicum/Seminar 0 6 3

Students are placed in field of interest. Work is supervised by coordinator. Some of this time may be used in campus seminars with faculty and specialists in various fields.

EDU 212—Practicum/Seminar 0 12 6

Students are placed in field of interest. Work is supervised by coordinator. Some of this time may be used in campus seminars with faculty and specialists in various educational fields.

ECONOMICS

ECO 201, 202, 203—Principles of Economics 3 0 3

A study of the present-day economic system; macroeconomics and microeconomics; demand supply, prices, and cost; wages, rent, interest, and profit; business cycles, money, banking, and the Federal Reserve System; international trade; and a comparison of Capitalism, Socialism, Communism, and Fascism.

(3 credits each quarter.)

ELECTRICITY

ELC 1102—Applied Electricity 2 3 3

ELC 1102-co 2 3 2

The use and care of test instruments and equipment used in servicing electrical apparatus for air conditioning, heating, and refrigeration equipment. Included will be transformers, various types of motors and starting devices, switches, electrical heating devices and wiring.

Prerequisite: PHY 1101.

ELC 1112—Direct and Alternating Current 5 12 9

A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchoff's Law. A study of the sources of direct current voltage potentials. Fundamental concepts of alternating current flow, reactance, impedance, phase angle, power, and resonance. Analysis of alternating current circuits.

ELC 1113—Alternating Current and Direct Current Machines and Controls 5 12 9

Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis. The basic concepts of AC and DC machines and simple system controls. An introduction to the type control used in small appliances such as thermostats, timers, or sequencing switches.

Prerequisites: ELC 1112, MAT 1115.

ELC 1124—Residential Wiring 5 9 8

ELC 1124-co 5 9 5

Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications such as services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, National Electrical Code regulations in actual building mockups.

Prerequisites: ELC 1113, DFT 1110.

ELC 1125—Commercial and Industrial Wiring 5 12 9

Layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation, and installation of simple systems.

Prerequisites: ELN 1118, ELC 1124.

ELECTRONICS

ELN 101—Fundamentals of Electronics I 4 5 6

Elementary principles of electronics including: basic electric units, Ohm's Law, Kirchoff's Law, network theorems, basic electrical measuring instruments, series circuits, parallel circuits, series-parallel circuits, direct current meters and metering circuits, and general DC circuit analysis. Elementary applications of devices are presented as well as laboratory experiments performed by students to verify and expand on the daily lessons.

ELN 102—Fundamentals of Electronics II 4 5 6

A study of alternating voltage and current, magnetism, electromagnetic induction, Lenz's Law, Faraday's Law of induced voltage, and AC component and circuit analysis. This includes inductance, inductive reactance, inductive circuits, capacitance, capacitive reactance, capacitive circuits, complex numbers, RC time constants, as well as resonant circuit and filter design. Electronic instruments and measuring techniques are studied in conjunction with laboratory experiments.

ELN 103—Vacuum Tubes and Solid State Devices 8 8 10

A study in depth of the theory and electrical characteristics of vacuum tubes and semiconductor devices which include: transistor physics, diodes, transistor basics, small signal amplifier design, power amplifiers, biasing techniques, and high frequency characteristics of junction and field-effect transistors. Planned laboratory experiments correlate with the lectures which enable the student to learn the instruments and measurements required to become familiar with these devices.

ELN 104—Radio and Television Servicing 4 8 8

This course is designed to cover the theory of operation and servicing techniques of radio and television receivers. Although the emphasis is on monochrome and color television sets, AM and FM radios are considered. The laboratory phase will consist of diagnosing of malfunctions; either real or simulated, and conducting logical troubleshooting procedures to locate the causes. Proper remedial techniques are applied such as component replacement and/or alignment to return the receiver to normal operating condition. The proper use of test equipment is an integral part and is encouraged throughout the course.

Prerequisite: ELN 101, 102, and 103, or equivalent.

ELN 105—Electronic Systems Maintenance 4 8 8

This course involves a study of the layout, installation, and maintenance of various sound, intercommunications, master antenna, control and distribution systems. Consideration is given to such items as timing mechanisms, solenoids, and other electromechanical devices.

ELN 201—Solid State Device Applications 5 5 7

A study and design of general transistor circuits, power sources, oscillators, multivibrators, and special phase and switching circuits. Consideration is also given to electronic noise analysis and special semi-conductor devices and their circuit utilization. Appropriate laboratory experiments enable the student to become competent in their applications.

ELN 202—Electronic Communications Systems 5 7 9

A study and analysis of circuitry of the various communications systems with design techniques for their application. This includes transmitters, receivers, transmission lines, antenna systems, modulation and demodulation principles, and microwave systems. Such topics as decibels, transducers, video systems, and radio propagation theory are also covered. Consideration is given to the requirements for obtaining an FCC First Class Radiotelephone License. Laboratory experiments are performed by the student to further his understanding of these systems.

ELN 203—Industrial and Digital Electronic Systems 7 6 10

This course covers the theory and applications of logic pulse gating, switching, bistable multivibrators, memory and storage devices, and input-output systems utilized in digital computers. The study of these systems and devices is for the student to understand how the computer performs electronically the unique mathematics described in MAT 202 "Digital Computer Mathematics." Lasers, motor controls, and other basic industrial electronic systems are considered. Special student projects of design and construction of typical systems are encouraged. Appropriate laboratory experiments are performed by the student to further his knowledge of these systems.

ELN 233—Communications Electronics 3 0 3

A study of AM, FM, and TV transmitters of the type certified by the Federal Communications Commission for standard broadcast. Associated equipment such as monitors, transmission lines, and antennas are considered. Included also is a coverage of the FCC Rules and Regulations governing all the various types of broadcast services. The combination of the theory and laws is such that the student can qualify by examination for an FCC First Class Radiotelephone Operator's License.

ELN 1118—Industrial Electronics 3 6 5

Basic theary, operating characteristics, and application of vacuum tubes such as: diodes, triodes, tetrodes, pentodes, and gaseous control tubes. An introduction to amplifiers using triodes, power supplies using diodes, and other basic applications.

Prerequisite: ELC 1113.

ELN 1119—Industrial Electronics 3 6 5

Basic industrial electronics systems such as: motor controls, alarm systems, heating systems and controls, magnetic amplifier controls, welding control systems using thyatron tubes, and other basic types of systems commonly found in most industries.

Prerequisite: ELN 1118.

ENGINEERING

EGR 105—Graphics for Engineers I 2 4 3

Instruction in the use of drafting instruments, freehand drawing, and lettering. Theory of projection, including orthographic multiviews, auxiliary views, and the various kinds of pictorial projections. Sectional views and conventional practices, dimensioning and notations. Representation and specifications of threads and fasteners, gears, and cams. Working drawings, including limits and tolerances. Concurrent enrollment in College Algebra or higher.

EGR 106—Graphics for Engineers II 2 4 3

Basic descriptive geometry; systematic solutions and analysis of the relationships of points, lines, and planes in space, developments and intersections. Applications of graphics to various fields of engineering. Vector geometry, graphic mathematics, and nomography. Concurrent enrollment in College Trigonometry or higher.

ENGLISH

ENG 090—Remedial English 3 0 0

A course for the improvement and development of writing techniques including emphasis on meaningful and logical sentence construction, paragraph building, outline preparation, and themes.

ENG 101—Freshman English I 3 0 3

This course is designed to help the student enrich his knowledge of English grammar, punctuation, sentence and paragraph building, and the use of the dictionary. These mechanics of English will be applied to short themes as required.

ENG 102—Freshman English II 3 0 3

This course is a continuation of Freshman English I, with frequent themes required. Conferences with individual students are recommended. There will be an introduction to principal literary forms by means of selections from modern authors and periodicals.

ENG 103—Freshman English III 3 0 3

This course emphasizes the development of good prose style and gives practice in the use of source materials. Longer themes and research papers will be required.

ENG 105—The Cinema: Introduction to Film 2 2 3

An introductory course in film appreciation. Various types of films will be viewed and discussed with particular attention given to the history, technology and social milieu within which movies are produced. Outside of class viewing of films and reading will be expected and a substantial written critique of a contemporary movie will be required.

ENG 151—Reading Improvement 2 0 2

See ENG 1101, Reading Improvement.

ENG 152—Communication Skills 3 0 3

See ENG 1102, Communications Skills.

ENG 201—Survey of English Literature I 3 0 3

A study of English Literature from Beowulf through Shakespeare.

ENG 202—Survey of English Literature II 3 0 3

A study of English Literature from the Puritan Period through the Age of Reason.

ENG 203—Survey of English Literature III 3 0 3

A study of English Literature from Romanticism to the present.

ENG 205—Report Writing 3 0 3

The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must relate to something in his chosen curriculum.

Prerequisite: ENG 102.

ENG 206—Business Communications 3 0 3
Develops skills in techniques in writing business communications. Emphasis is placed on writing action-getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgements, remittances, and inquiry.
Prerequisite: ENG 102.

ENG 210—Survey of American Literature I 3 0 3
A study of the writings of the Colonial Period and the Romantic Period through Melville.

ENG 211—Survey of American Literature II 3 0 3
A study of the literature of the Transcendentalists and the Realists through Twain.

ENG 212—Survey of American Literature III 3 0 3
A study of the literature of American Naturalism, to the present.

ENG 214—Survey of Western World Literature I 3 0 3
The Ancient World includes selections from the Old Testament, Greek and Roman literature, and the New Testament.

ENG 215—Survey of Western World Literature II 3 0 3
The Middle Ages, Renaissance, and Enlightenment includes selections from Italian, French, and Spanish literature.

ENG 216—Survey of Western World Literature III 3 0 3
The Modern World includes selections from the best of the Romantics, Symbolists, and Modernists in poetry, plays, and short stories.

ENG 225—Children's Literature 3 0 3
Survey of literature for children. Kindergarten through Junior High levels.

ENG 1101—Reading Improvement 2 0 2

ENG 1101-co 2 0 2
Designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition, and train for comprehension in larger units.

ENG 1102—Communication Skills 3 0 3
Designed to promote effective communication through correct language usage in speaking and writing.
Prerequisite: ENG 1101.

FRENCH

FRE 101, 102, 103—Elementary French I, II, III 2 3 3
An introduction to French with a modern audio-lingual approach. Up-to-date materials and methods. Emphasis first on hearing and speaking, then on reading and writing. Lab work is required as part of the course for those with no previous French or those who do not make a satisfactory score on the French placement test.
Prerequisite: Satisfactory score on college placement test.

FRE 151, 152, 153—Intermediate French I, II, III 2 3 3

A review of the skills of hearing, speaking, reading and writing. Audio-lingual work in class and in lab. Selected supplementary readings.

Prerequisites: Two units of high school French and a satisfactory placement test score on FRE 101 and FRE 102.

FRE 201, 202, 203—Survey of French Civilization I, II, III 2 3 3

A study of French culture and civilization. Selected readings in French literature from the Middle Ages to the present. Parallel reading and reports.

GEOGRAPHY

GEO 201—Physical Geography 3 0 3

The earth's astronomical relations, factors of weather and climate, physical features and changes of landforms.

GEO 202—Economic Geography 3 0 3

Geographic and economic factors involved in production, distribution, consumption, and conservation of the major resources of the world.

GERMAN

GER 101, 102, 103—Elementary German I, II, III 3 0 3

Essentials of grammar, graded reading, vocabulary building. Laboratory.

GER 151, 152, 153—Intermediate German I, II, III 3 0 3

Review of grammar, reading lyrics, short stories, and selections from plays.

HISTORY

HIS 101, 102, 103—History of Western Civilization I, II, III 3 0 3

The institutions and culture of Western society from 5,000 B.C. to the present. Topics include the classical Greek and Roman worlds, the growth of Christianity, Medieval Europe, the Renaissance, the Reformation, the emergence of the modern national state, the rise of commercial capitalism, the Industrial Revolution, the French Revolution, liberalism, nationalism, the alliance system, imperialism, World War II and its aftermath, and the ideologies of the twentieth century. Three quarters.

HIS 104—Modern History 3 0 3

A foundation for the study of current international problems styled primarily for technical and vocational students. Emphasis on Europe and America in the nineteenth and twentieth centuries but in a world context and against a general background of ancient, medieval, and early modern history.

HIS 201, 202, 203—American History 3 0 3

A survey of American History from the period of discovery and colonization to the present. The course is conducted through lectures, textbooks, collateral reading and map studies.

HIS 204—Current World Problems 3 0 3

A detailed examination of current international problems, including nationalism in underdeveloped countries, racial minorities, water and air pollution, the population explosion and famine, the armaments race, and international organizations—but with emphasis on a particularly urgent problem of present world concern. In addition to text and periodical assignments and daily newspaper readings, each student will be expected to present a comprehensive oral or written report.

HIS 205—Black History 3 0 3

This course deals with the forces and personalities which have shaped the history of the Negro in the United States. Selected racial and ethnic groups are studied with special reference to the histories and sociocultural determinants of the group studied.

LIBRARY

LIB 101—Introduction to Library Services 3 0 3

Philosophy of information service. Background and history of libraries and learning resource centers. Introduction to classification and organization of material.. Study of duties and qualification of library personnel.

LIB 201—Library Processes I 3 0 3

An introduction to classification systems. General and special reference sources with practice in preparing bibliographies.

LIB 202—Library Processes II 3 0 3

A study of the techniques of book selection through use of book lists, reviews, trade publications and other sources. Techniques of ordering and budget control.

LIB 203—Library Processes III 3 0 3

Principles involved in circulation procedures, inventory control, and care and repair of library materials.

MASONRY

MAS 1101—Masonry Fundamentals I 3 12 7

MAS 1101-co 3 12 5

An introduction to the various types of masonry construction, including brick, concrete blocks and concrete.

MAS 1102-co—Masonry Fundamentals II 3 12 5

Basically a skill development course. Various patterns of brick bonds as well as block, tile and roof laying will be studied.

MATHEMATICS

MAT 080, 081, 082—Remedial Mathematics 3 0 0

A three-quarter, three-hour per week course consisting of an intensive study of pre-college algebra and geometry and of the arithmetical skills necessary in a study of college-level mathematics.

MAT 101—College Mathematics I 3 0 3

First of a three-quarter sequence of courses which comprise the minimum requirements for all AA candidates. Topics include: sets, concepts of logic, mathematical systems, systems of numeration, and the sets of integers. Number theory includes base five arithmetic, congruences, and modular systems.

MAT 102—College Mathematics II 3 0 3

A continuation of MAT 101. Main emphasis is on the development of the properties of the sets of integers, rational numbers, and real numbers. Other topics include linear equations, inequalities, and absolute values of one and two variables.

Prerequisite: MAT 101 or consent of instructor.

MAT 103—College Mathematics III 3 0 3

Last of three-quarter course sequence. Topics are: points, lines, planes, linear measure, angular measure, similar and congruent triangles, coordinate geometry, and a brief treatment of probability and statistical methods. Introduction to the rudiments of plane analytic geometry.

Prerequisite: MAT 101 - 102 or consent of the instructor.

MAT 105, 106—College Algebra and Trigonometry 5 0 5

Designed to promote understanding of the logic structure of algebra with the development of algebraic techniques, along with a study of analytic trigonometry. Topics include: the theory of sets of integers, rational numbers, real numbers, complex fields, equations, inequalities, functions and relations, exponential and logarithmic functions, trigonometric functions, identities, equations, circular functions, inverse functions, triangle solution including sine and cosine laws, matrices, and series.

MAT 107—Analytic Geometry and Calculus I 5 0 5

A unified sequence in analytic geometry and differential and integral calculus. (This sequence is recommended for students in the sciences and engineering programs.)

Prerequisite: MAT 106 or the equivalent and consent.

MAT 110—Technical Mathematics I 5 0 5

The real number system is developed as an extension of natural numbers. Number systems of various bases are introduced. Fundamental algebraic operations, the rectangular coordinate system, as well as the fundamental trigonometric concepts and operations are introduced. The application of these principles to practical problems is stressed.

MAT 111—Technical Mathematics II 5 0 5

The objective of this course is to develop an understanding of simultaneous equations, trigonometric functions, with applications and analysis, and the algebra of complex numbers. In addition, students continue to be given instruction in slide-rule operation with work in the accompanying handbook.

Prerequisite: MAT 110.

MAT 112—Technical Mathematics III 5 0 5

The objective of this course is to develop an understanding of analytic geometry and the calculus. Instruction in slide-rule operation continues.

Prerequisite: MAT 111.

MAT 133—Criminal Justice Mathematics 5 0 5

The math principals presented are designed to meet the needs of the criminal justice-protective service professional. Topics studied are formulas, logarithms, right triangle trigonometry, graphing, and statistics in relation to applications for VASCAR, breathalizer, radar, and other such devices.

MAT 151—Fundamentals of Mathematics 5 0 5

See MAT 1101—Fundamentals of Mathematics.

MAT 152—Algebra 3 0 3

See MAT 1101—Algebra.

MAT 153—Geometry 3 0 3

See MAT 1103—Geometry.

MAT 154—Trigonometry 3 0 3

See MAT 1104—Trigonometry.

MAT 201—Technical Mathematics IV 5 0 5

A continuation of MAT 112. More advanced concepts of differentiation and integration are considered. Included are graphs and derivatives of the trigonometric functions, exponetial and logarithmic differentiation and integration, advanced integration techniques, polar equations, and parametric equations.

Prerequisite: MAT 112.

MAT 202—Digital Computer Mathematics 5 0 5

An examination of the mathematical concepts necessary to understand and design electronic computer circuits. Topics will include: decimal, binary, and octal number base systems; arithmetic operation in the binary number system; logic, Boolean algebra; Venn diagrams; codes and decimal arithmetic. Flip-flops and their application to electronic digital circuits will be an integral part of the course.

MAT 205—Analytic Geometry and Calculus II 5 0 5

A continuation of MAT 107. Topics include definite integrals; application to areas, volumes, arc lengths and work, exponential and trigonometric functions; integration methods.

Prerequisite: MAT 107 or consent.

MAT 206—Analytic Geometry and Calculus III 5 0 5

A continuation of MAT 205. Included will be conics, moments, centers of gravity, indeterminate forms, improper integrals, series, two-dimensional vector algebra, and polar coordinates.

Prerequisite: MAT 205 or consent.

MAT 207—Analytic Geometry and Calculus IV 5 0 5

A continuation of MAT 206. Included are three-dimensional vectory algebra, multiple integrals, line integrals, surface integrals, and change of variables.

Prerequisite: MAT 206 or consent.

MAT 208—Differential Equations 5 0 5

Special non-linear equations, linear equations, transformations, symbolic method; solutions in series; Gauss, Bessel and Legendre equations; simultaneous differential equations.

Prerequisites: MAT 205, 206, 207.

MAT 210—Introduction to Linear Algebra 5 0 5

A study of vectors, matrices, and determinants leading to a wide variety of problems in linear algebra that arise in mathematics and the natural sciences, engineering, business, and the social sciences.

MAT 1101—Fundamentals of Mathematics 5 0 5

Practical number theory. Analysis of basic operations: addition, subtraction, multiplication, and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry, measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.

MAT 1102—Algebra 3 0 3

Basic concepts and operations of algebra: historical background of our base-10 number system; algebraic operations: addition, subtraction, multiplication, and division; fraction, letter representation, grouping, factoring, ratio and proportions, variation; graphical and algebraic solution of first degree equations; solutions of simultaneous equations by: addition and subtraction, substitution, graphing, exponents, logarithms, table and interpolation.

MAT 1103—Geometry 3 0 3

Fundamental properties and definitions; plane and solid geometric figures, selected general theorems, geometric construction of lines, angles and plane figures. Dihedral angles, areas of plane figures, volumes of solids. Geometric principals are applied to shop operations.

MAT 1104—Trigonometry 3 0 3

Trigonometric ratios; solving problems with right triangles, using tables and interpolating; solution to oblique triangles using law of sines and law of cosines; graphs of the trigonometric functions; inverse functions, trigonometric equations.

Prerequisite: MAT 1103.

MAT 1112—Building Trades Mathematics 3 0 3

MAT 1112-co 3 0 3

Practical problems dealing with volumes, weights, ratios, mensuration, and basic estimating practices for building materials.

MAT 1113—Construction Estimating 3 0 3

MAT 1114-co— 3 0 3

MAT 1103-co 3 0 3

Basic methods of estimating quantities and cost of materials and labor for various types of construction.

MAT 1114—Construction and Estimating II 3 0 3
MAT 1114-co 3 0 3

This course is a continuation of MAT 1113. Topics of study will include techniques used in the cost analysis of various types of structures.

MAT 1115—Electrical Mathematics 5 0 5
MAT 1115-co

A study of fundamental concepts of algebra, basic operations of addition, subtraction, mutiplication, and division; solution of first order equations, use of letters and signs, grouping, factoring, exponents, ratios, and proportions; solutions of equations, algebraically and geographically; a study of logarithms and use of tables; an introduction to trigonometric functions and their application to right angles; and a study of vectors for use in alternating current.

MECHANICS

MEC 101—Machine Processes I 1 5 3

An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of measuring instruments, characteristics of metals and cutting tools by performing selected operations such as turning, facing, threading, drilling, boring and reaming.

MEC 102—Machine Processes II 1 5 3

Advanced operations on lathe, drilling, boring, and reaming machines. Milling machine theory and practice. Thorough study of the types of milling machines, cutters, jig and fixture devices, and the accessories used in a modern industrial plant. Safety in the operational shop is stressed.

Prerequisite: MEC 101.

MEC 103—Treatment of Ferrous Metals 2 2 3

See MEC 1115—Treatment of Ferrous Metals.

MEC 104—Treatment of Non-Ferrous Metals 2 2 3

See MAT 1116—Treatment of Non-Ferrous Metals.

MEC 151—Machine Shop Theory and Practice 3 12 9

See MAT 1101—Machine Shop Theory and Practice.

MEC 152—Machine Shop Theory and Practice 3 12 9

See MEC 1102—Machine Shop Theory and Practice.

MEC 153—Machine Shop Theory and Practice 3 12 9

See MEC 1103—Machine Shop Theory and Practice.

MEC 154—Machine Shop Theory and Practice 3 12 9

See MEC 1104—Machine Shop Theory and Practice.

MEC 205—Strength of Materials 3 2 4

Study of principals and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying, and dynamic. Analyses of these stresses are made as applied to thin-walled cylinders and sphere, riveted and welded joints, beams, columns, and machine components.

Prerequisites: PHY 106, MAT 111.

MEC 210—Physical Metallurgy I 3 3 4

Introductory course in metallurgy, a basic study of the properties of metals and alloys. Analysis of the structure of metals and alloys, atomic structure, nuclear structure, and nuclear reactions. Solid (Crystalline) structures, methods of designing crystal planes; liquid and vapor phases; phase diagrams; and alloy systems.

Prerequisite: PHY 101.

MEC 211—Physical Metallurgy II 3 3 4

Properties of metals and alloys, the reactions of metals, diffusion, carburizing, metal bonding and homogenization; recrystallization and grain, growth, age hardening, nitriding, internal oxidation; heat treatment of steel; laboratory experiments, and demonstrations.

Prerequisite: MEC 210.

MEC 235—Hydraulics and Pneumatics 3 3 4

The basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits and motors, controls, electro-hydraulic servomechanisms, plumbing, filtration, accumulators and reservoirs.

Prerequisite: PHY 102.

MEC 251—Machine Shop Theory and Practice 2 10 7

The topics of study for this course include advanced operations on general machine tools and layout procedures. Laboratory work will involve skill development exercises in the above areas.

MEC 252—Machine Shop Theory and Practice 2 10 7

An in-depth study of special machine tools. Emphasis placed on production set up and operation including the calculating and cutting of spur, helical, and worm gears.

MEC 253—Machine Shop Theory and Practice 2 10 7

The culminating course in the machinist curriculum, emphasizing the development of class and individual projects. Laboratory work will include the engineering and production of a product.

MEC 1101—Machine Shop Theory and Practice 3 12 7

An introduction to the machinist trade and the potential it holds for a craftsman. Deals primarily with the identification, care, and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes of lathe, drill press, grinding (off-hand) and milling machines will be introduced both in theory and practice. Basic safety and job planning will be stressed in all machine shop courses.

MEC 1102—Machine Shop Theory and Practice 3 12 7

Advanced operations in layout tools and procedures, power sawing, drill press, surface grinder, milling machine shaper. The student will select projects encompassing all the operations, tools, and procedures thus far used and those to be stressed throughout the course.

Prerequisite: MEC 1101.

MEC 1103—Machine Shop Theory and Practice 3 12 7

Advanced work on the engine, lathe, turning, boring, and threading machines, grinders, milling machines, and shapers. Introduction to basic indexing and terminology. The trainee will use precision tools and measuring instruments such as vernier height gauges, protractors, comparators, etc.

Prerequisite: MEC 1102.

MEC 1104—Machine Shop Theory and Practice 3 12 7

Development of class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly, and inspection. Additional processes on the lathe, surface grinder, advanced milling machine operations, etc. Special procedures and operations processes and equipment, observing safety procedures faithfully and establishing good work habits and attitudes acceptable to the industry.

Prerequisite: MEC 1103.

MEC 1112—Machine Shop Processes 1 5 3

To acquaint the student with the procedures of layout work and the correct use of hand and machine tools. Experience in the basic fundamentals of drill press and lathe operations; hand grinding of drill bits and lathe tools; set-up work applied to the trade. (For welding students.)

MEC 1115—Treatment of Ferrous Metals 2 3 3

An introduction to the properties of ferrous metals and tests to determine their uses. A background in the chemical aspects of metallurgy will be developed for a better understanding of the physical changes and causes of the changes in metals. The main topics of study will include iron and steel production, theory of alloys, shaping and forming, heat treatments for steels and alloys.

Prerequisite: PHY 1102.

MEC 1116—Treatment of Non-Ferrous Metals 2 3 3

Continuation of the study of physical metallurgy. Among nonferrous metals to be studied will be bearing metals (brass, bronze, lead), light metals (aluminum and magnesium) and copper and its alloys.

MEC 1120—Duct Construction and Maintenance 3 6 5

Study of various duct materials including sheet steel, aluminum, and fiber glass. Safety, sheet metal hand tools, cutting and shaping machines, fasteners and fabrication practices, layout methods, and development of duct systems. The student will service various duct systems and perform on-the-site repairs including ducts made of fiber glass. A study is made of duct fittings, dampers and regulators, diffusers, heater and air washers, fans, insulation, and ventilating hoods.

Prerequisite: DFT 1116.

MUSIC

MUS 101—Introduction to Music 3 0 3

A non-technical course in music appreciation. Musical elements such as rhythm, harmony, tone, color, and form are analyzed and discussed. Musical masterworks are employed to develop an understanding of the role of music in contemporary culture.

MUS 102—History of Music 3 0 3

The growth of music from its beginning to the Modern Era. Representative works of various composers and periods are presented for analysis and discussion.

MUS 103, 104, 105—College Chorus 0 2 1

A study of vocal techniques and choral interpretation. Ensemble singing including the performance of works from standard choral repertory. Voice range audition is required of all students. Attendance at rehearsals and performance is expected. The course is open to all students. Meets two hours per week for one credit.

MUS 110—Class Piano 1 0 1

A course in piano technique designed to teach students the beginning skills of piano playing. A study of the easier theory of music, such as scales and chords, will be included.

MUS 115, 116, 117—College Band 0 2 1

The study and performance of music literature for the band. The band presents concerts during the school year and performs at college games and other special occasions.

Prerequisite: Permission of instructor.

MUS 120—Guitar I 0 3 1

A beginning guitar course consisting of teaching the seven major keys, major chords, minor chords, 7th chords, sharps, and flats. Also included are the basic fundamentals of taking care of the guitar, installing new strings, and tuning the guitar. At the end of this course, the student should be playing rhythm to three-chord tunes and songs.

MUS 121—Guitar II 0 3 1

An advanced course, starting where the beginning course stops, consisting of group and individual practice of the chord movements of the left hand, and the rhythm movements of the right hand. At the end of this course, the student will be playing rhythm to almost any tune or song.

Prerequisite: MUS 120.

MUS 122—Guitar III 0 3 1

An instrumental guitar course consisting of teaching the finger board notes in all seven keys and between-chord-run notes. This course will teach the student to play several instrumental tunes.

Prerequisite: MUS 121.

MUS 203, 204, 205—College Chorus 0 2 1

A continuation of MUS 103, 104, 105.

MUS 215, 216, 217—College Band 0 2 1

A continuation of MUS 115, 116, 117.

NURSING

NUR 101—Nursing I 4 6 6

This course is designed to assist the student to use the beginning concepts and basic principles of nursing care. Communication skills, community health, aseptic and sterile technique, pharmacology, safety and body mechanics are included. Selected therapeutic measures are taught and the development of beginning skills in the clinical area is expected.

Prerequisite: Admission to the nursing program.

Corequisite: BIO 104.

NUR 102—Nursing II 5 9 8

This course is designed to broaden the student's knowledge of nursing principles and skills begun in NUR 101. Basic theories and concepts of maternity nursing are presented. Opportunities are provided for the student to acquire experience in caring for a woman during the maternity cycle and the newborn infant. Emphasis is on family centered care.

Prerequisite: NUR 101, BIO 104.

Corequisites: BIO 105, BIO 106.

NUR 103—Nursing III 5 9 8

This course is designed to assist the student in the study of nursing problems and interventions related to selected disease conditions. The student will be guided in assessing needs, establishing goals, selecting appropriate nursing actions and evaluating the effectiveness of nursing care. Clinical experiences are provided to aid the student in observing signs and symptoms, preparation of the patient for specific diagnostic tests, and surgical procedures, administration of therapeutic agents and understanding the factors underlying selected conditions. Continued opportunities will be provided to broaden the student's learning in maternity nursing and aseptic techniques.

Prerequisites: NUR 102, BIO 104, BIO 105.

NUR 104—Nursing IV 4 8 6

A study of the behavior of mentally ill patients designed to further develop the student's understanding of patients' reactions to illness. Opportunities are provided for students to develop nursing skills through interrelationships with patients who have behavioral disorders and to examine mental illness as a community health problem.

Prerequisite: NUR 103.

NUR 205—Nursing V 5 12 9

Common medical-surgical problems are presented stressing pathology, treatment and nursing care. Nursing care planning for individual patients is included. Concurrent clinical experience is required.

Prerequisite: NUR 104.

NUR 206—Nursing VI 5 12 9

A continuation of normal growth and development as it relates to the child's adjustment to illness, disease and surgical interventions most commonly occuring during childhood. Clinical experience on a pediatric unit is required.

Prerequisites: NUR 205, PSY 201.

NUR 207—Nursing VII 5 15 10

Continuation of NUR 205. Concurrent clinical experience is required.

Prerequisite: NUR 205 and 206.

NUR 208—Nursing VIII 2 0 2

In preparing for employment, the student studies current problems in nursing responsibilities to the physician, her employer, her co-workers, and to herself. Nursing organizations and employment opportunities are also presented.

PHILOSOPHY

PHI 201, 202—Introduction to Philosophy I, II 3 0 3

A study of fundamental problems of philosophy, emphasizing the importance of philosophical thinking for man's everyday experience; and examination of typical ideas and systems of ideas throughout history.

PHYSICAL EDUCATION

The importance of individual physical fitness, the teaching of fundamentals, techniques, and rules of play are the major objectives of each class. Each class meets approximately 24 hours per quarter.

MEN

PED 101	Soccer and Flag Football	0	2	1
PED 102	Basic Tumbling and Wrestling	0	2	1
PED 103	Softball and Archery	0	2	1
PED 106	Basketball	0	2	1
PED 201	Table Tennis & Volleyball	0	2	1
PED 202	Badminton and Bowling	0	2	1
PED 203	Basic Tennis	0	2	1

WOMEN

PED 101	Soccer and Speedball	0	2	1
PED 102	Gymnastics & Basketball	0	2	1
PED 103	Softball and Archery	0	2	1
PED 201	Table Tennis & Volleyball	0	2	1
PED 202	Badminton and Bowling	0	2	1
PED 203	Basic Tennis	0	2	1

CO-EDUCATIONAL

PED 104	Basic Swimming	0	2	1
PED 105	Square and Folk Dancing	0	2	1
PED 107	Physical Fitness	0	2	1
PED 204	Advanced Tennis	0	2	1
PED 206	Golf	0	2	1
PED 207	Judo	0	2	1
PED 205	Personal Health & Community Hygiene	3	0	3

The study of personal and community health and hygiene as it relates to the individual in society.

PED 110—First Aid & Safety 2 0 2

Standard and advanced courses in first aid as organized by American Red Cross. Accident preventions.

PED 210—Adaptive Physical Education 3 0 3

A study of how recreational and physical education activities can be adapted to the retarded, blind, mentally ill, elderly, and other special groups.

PHYSICAL SCIENCE

PHS 101—Physics Survey 2 2 3

The beginning course of physical science includes a study of physics. Some of the topics of discussion are measurements, forces, gravity, mechanics, heat, light, sound, electricity, and atomic properties.

PHS 102—Chemistry Survey 2 2 3

Included in this course are general discussions of the basic concepts of chemistry and the properties of elements. Topics of discussion include the following: chemical processes, water, ionization, nitrogen, the halogen, sulfur, carbon and silicon, and organic and food chemistry.

PHS 103—Meterology-Geology-Astronomy 2 2 3

Topics for consideration are atmosphere, weather, erosion, rocks, earth's past, the solar system, the Milky Way, and extragalactic systems.

PHYSICS

PHY 101—Mechanics 3 2 4

An introductory course in physics designed for the technically oriented student covering measurement both in English of metric systems, vectors, linear motion, Newton's laws, energy, and rotational motion.

PHY 102—Properties of Matter and Heat 3 2 4

This course includes the study of gas, solids, and liquids under varied conditions. Heat and thermodynamic investigations are discussed. The course closes with an investigation into the history and basic properties of nuclear and atomic physics.

PHY 103—Electricity 3 2 4

Electrostatics, magnetism and current electricity are the subjects covered in this course. Topics such as meters, induction, transformers, Ohm's laws and Kirchoff's laws are discussed in detail.

PHY 104—Light and Sound 3 2 4

Light and sound are the two areas which constitute this course. Concepts of interference, Doppler effect, particle and wave theories of light, and spectra classification are some of the main topics discussed.

PHY 106—Applied Mechanics 5 0 5

Concepts and principles of statics and dynamics. Parallel concurrent and noncurrent force systems in coplaner and noncoplaner situation. Concepts of centroids and center of gravity, moments of inertia, fundamentals of kinetics, and kinematics of velocity and motion.

Prerequisites: MAT 103, PHY 102.

PHY 110—Physics for Health Occupations 2 2 3

A survey course with particular attention given to the application of classical physical principles to physiologic processes, therapeutic procedures, and various apparatis found in health services.

PHY 151, 152—Applied Science 3 2 4

See PHY 1101 and 1102—Applied Science.

PHY 201—General Physics I 3 2 4

This course, which is designed primarily for physics and engineering (and technology) majors, includes in the first quarter of study the following: machines and vector analysis, particle and rigid body mechanics, statics, rotary motion, Newton's laws, and conservation laws.

PHY 202—General Physics II 3 2 4

Second quarter of general physics includes the study of heat, sound, light, wave motions, and optics.

Prerequisite: PHY 201.

PHY 203—General Physics II 3 2 4

Final quarter of general physics includes the study of electricity, magnetism, atomic and nuclear physics.

Prerequisite: PHY 202.

PHY 204—General Physics IV 4 2 5

A calculus based course, designed primarily for physics and engineering majors, includes in the first quarter of study the following: vector analysis, particle and rigid body mechanics, statics, rotary motion, Newton's laws, and conservation laws.

Prerequisite or concurrently: MAT 107.

PHY 205—General Physics V 4 2 5

Second quarter of the calculus based physics. Some topics are heat, sound, light, wave motions, optics, and atomic spectra.

Prerequisite or concurrently: MAT 205.

PHY 206—General Physics VI 4 2 5

Third quarter of the calculus based physics. Some topics are electricity, magnetism, atomic and solid-state physics, and nuclear physics.

Prerequisite or concurrently: MAT 206.

PHY 1101—Applied Science 3 2 4

An introduction to physical principles and their application in industry. Topics in this course include measurement; properties of solids, liquids, and gases; basic electrical principles.

PHY 1102—Applied Science 3 2 4

The second in a series of two courses of applied physical principles. Topics introduced in this course are heat and thermometry, and principles of force, motion, work, energy, and power.

POLITICAL SCIENCE

POL 201—American National Government 3 0 3

A study of the formation and development of the national government, its organization, functions and powers, and civil rights.

POL 202—American State and Local Government 3 0 3

A study of the organization, functions, and powers of state and local government in the United States.

PLUMBING

PLU 1101—Plumbing and Fundamentals 3 12 7

PLU 1101-co 3 12 5

Topics of study will include modern plumbing techniques, procedures, fixtures, and machinery.

PSYCHOLOGY

PSY 101, 102—General Psychology I, II 3 0 3

An introductory survey of psychology. Topics include pre- and post-natal development, the structure and functions of the nervous systems and glands, sensory organs and processes, intelligence, aptitudes and abilities, perception, motivation, learning, emotion, personality, and adjustment.

PSY 103—Human Potential Seminars 2 0 2

Through a small group process and readings in the field of self-actualization psychology, the purpose of this course is to help persons discover and actualize their capabilities and strengths.

PSY 104—The Psychology of Personal Adjustment 3 0 3

Through a study of ego and personality development—utilizing the latest psychological theories—to understand the development of the self-concept, patterns of interpersonal relations, handling stress and pressures and effective life adjustment.

Prerequisite: Either PSY 101, 102, or 103.

PSY 110—Human Relations in Management 3 0 3

A behaviorial science approach to business. Management problems related to motivation, communication, organization, balance and change; recognition and analysis of problems in human interaction.

PSY 151—Human Relations 3 0 3

A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

PSY 201, 202—Human Development I, II 3 0 3

Development of the normal child and adolescent, with consideration of the social, biological and cultural influences upon growth. Two quarters.

Prerequisites: PSY 101, 102.

PSY 205—Adolescent Psychology 3 0 3

A study of the nature and source of the problems of adolescents in western culture; physical, emotional, social, intellectual, and personality development of adolescents.

PSY 208—Abnormal Psychology 3 0 3

A study of the symptoms, contributing factors, treatment and outcomes of the mentally ill and mentally defective as well as maladjusted, anti-social persons. Classifications and nomenclature of psychoneurosis, psychoses, and other illnesses are discussed.

PSY 210—Exceptional Children 3 0 3

A study of young children who vary from the "norm." Emphasis on the very bright child and the handicapped child.

PSY 1101—Human Relations 3 0 3

PSY 1101-co 3 0 3

A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

READING

REA 101—College Reading Skills 3 0 3

A general course to aid students in improving their basic skills in reading and study practices. Basic comprehension, listening and vocabulary skills will be studied. Students will be tested to determine their strengths and weaknesses in the area of reading skills.

REA 102—College Vocabulary and Comprehension Skills 3 0 3

A course designed to provide students with the opportunity to study college vocabulary and comprehension skills. Emphasis will be placed on word derivation and word meaning. Comprehension will include critical reading and speed reading. Testing will be utilized to determine strengths and weaknesses in the areas of vocabulary and comprehension.

REA 103—Speed Reading 3 0 3

A course designed to give students the opportunity to increase their speed in reading. Emphasis will be placed on speed and comprehension. Diagnostic testing will be utilized to determine the individual student's readiness for speedreading.

RECREATION

REC 111—Social Recreation 3 0 3

Planning, programming and conducting social recreation in clubs, camps, playgrounds and recreation centers.

REC 115—Chess 1 2 2

The student is given a brief history of the game, the rules of play, and basic techniques for winning play. Emphasis is placed on opening theory with a study of several popular openings. The Elo rating system is also discussed.

REC 201—Nature and Outdoor Recreation 3 0 3
Recreation as it relates to our natural resources. Ecology, conservation, nature study and camping activities are practiced.

REC 202—Water Sports and Recreation 3 0 3
Skills and techniques in swimming, canoeing, angling, and other water sports are studied.

REC 203—Recreation Administration 3 0 3
Personnel management, organization, budgets, and legislation are some of the areas covered from a recreational viewpoint.

RELIGION

REL 101—Introduction to Old Testament 3 0 3
A survey of the Old Testament designed to introduce the student to the history, literature and religion of the ancient Hebrews.

REL 102—Introduction to New Testament 3 0 3
An examination of the New Testament intended to introduce the student to the Jewish background, the historical setting, the purpose, and the major ideas of this literature. Special emphasis will be given to the significance of the ministry of Jesus and the Apostle Paul.

REL 205—Comparative Religion 3 0 3
A comparative study of the major religions of the world, both ancient and modern. An analysis of major religious concepts with attention given to the effects of contemporary history.

SAFETY

SAF 1101—Safety and First Aid (Vocational) 2 0 2

SAF 1101-co 2 0 2

Principles and practices as applied to emergency first aid, study of safety procedures and techniques as related to vocational training with the teaching emphasis placed on accident prevention.

SAF 1102-co—Safety and First Aid II 2 0 2
A continuation of Safety and First Aid I. Study of safety procedures and techniques as related to vocational training with the teaching emphasis placed on accident prevention.

SOCIOLOGY

SOC 105—Introduction to Human Resources 2 0 2
A study of the various local, state, and federal agencies involved in assistance programs. Introduction to study of people who need assistance because of economic, social, physical, or mental disabilities.

SOC 201—Introduction to Sociology 3 0 3
A study of the fundamental principles and concepts of sociology, with emphasis on contemporary American institutions in relation to technological change, ethnic groups, population trends and social control.

SOC 202—Marriage and the Family 3 0 3

A study of the family as a social institution—its origins and development, its forms and functions, its interrelation with other social institutions, and its role in contemporary civilization. In connection therewith, a study is made of sex development, differentiations, social relationships between the sexes, and factors contributing to or mitigating against successful, stable marriages.

SOC 203—Social Problems 3 0 3

A study of some of the major social problems applying basic sociological principles. Evaluation of the techniques utilized by society to solve social problems, along with the impact of social and technological changes.

SOC 205—Race and Ethnic Relations 3 0 3

Study of human relationships, intrapersonal, interpersonal, intergroup, and inter-nation which are caused by concepts and beliefs related to biological and value differences between men. Analysis of factors involved in group conflict with emphasis on conflict between minority groups in contemporary societies. Origins of myths about ethnic characteristics and identity questions will be examined.

SPANISH

SPA 101, 102, 103—Elementary Spanish I, II, III 2 3 3

An introduction to Spanish, with a modern, audio-lingual approach. Up-to-date materials and methods are used. Emphasis first on hearing and speaking, then on reading and writing. Lab work is required as part of the course for those with no previous Spanish or those who don't make satisfactory score on Spanish placement tests. Three quarters.

SPA 151, 152, 153—Intermediate Spanish I, II, III 2 3 3

A review of the skills of hearing, speaking, reading and writing. Audio-lingual work in class and in lab. Selected supplementary readings. Three quarters.

Prerequisites: Two units of high school Spanish and a satisfactory placement test score, or SPA 101, SPA 102, and 103.

SPA 201, 202, 203—Spanish Civilization I, II, III 3 0 3

A study of Spanish culture and civilization. Selected readings in the literature of Spain and Spanish America from the Middle Ages to the present. Parallel reading and reports. Three quarters.

Prerequisite: Permission of instructor.

SPEECH

SPH 101—Speech I 3 0 3

This course involves the study and application of the fundamentals of extemporaneous speaking. Consideration of the mechanics of speech is involved with emphasis on oral reading as a means of improving voice and articulation.

SPH 102—Speech II 3 0 3

A study of oral interpretation of literature including the ballad; lyric and narrative poetry; the article and short story; dramatic reading; and an introduction to the principles of argumentation and debate.

SPH 103—Speech III 3 0 3

A study of representative, modern, and contemporary, one-act plays. Wide reading in the genre will be required. Study will be reinforced by at least one play production.

WELDING

WLD 101—Welding Processes 1 4 3

An introductory course designed to acquaint the student with the various welding processes.

WLD 161—Basic Gas Welding 0 3 1

WLD 1101—Basic Gas Welding 0 3 1

WLD 1101-co 0 3 1

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding, bronze welding, silver-soldering, and flame-cutting methods applicable to mechanical repair work.

WLD 1102-co—Basic Arc Welding 0 3 1

Introduction to basic arc welding. Demonstrations by the instructor and basic welding practice by students. Safety practices will be stressed throughout the course.

WLD 1112—Mechanical Testing and Inspection 1 3 2

The standard methods for mechanical testing of welds. The student is introduced to the various types of tests and testing procedures and performs the details of the test which will give adequate information as to the quality of the weld. Types of tests to be covered are: bend, destructive, free-bend, guide-bend, nick-tear notched bend, tee-bend, nondestructive, V-notch, Charpy impact, etc.

Prerequisites: WLD 1120, WLD 1121.

WLD 1120—Oxyacetylene Welding and Cutting 3 12 7

Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, assembly of units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead position, brazing, hard and soft soldering. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. Students perform mechanical testing and inspection to determine quality of the welds.

WLD 1121—Arc Welding 3 12 7

The operation of AC transformers and DC motor generator arc welding sets. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weaknesses in welding. Safety procedures are emphasized throughout the course in the use of tools and equipment.

WLD 1122—Commercial and Industrial Practices 3 9 6

Designed to build skills through practices in simulated industrial processes and techniques: sketching and laying out on paper the size and shape description, listing the procedure steps necessary to build the product, and then actually following these directions to build the product. Emphasis is placed on maintenance, repairing worn or broken parts by special welding applications, field welding and nondestructive test and inspection.

Prerequisites: WLD 1120, WLD 1121.

WLD 1123—Inert Gas Welding 1 3 2

Introduction and practical operations in the use of inert-gas-shield arc welding. A study will be made of the equipment, operation, safety and practice in the various positions. A thorough study of such topics as: principles of operation, shielding gases, filler rods, process variations and applications, manual and automatic welding.

Prerequisites: WLD 1120, WLD 1121.

WLD 1124—Pipe Welding 3 12 7

Designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code.

Prerequisite: WLD 1121.

WLD 1125—Certification Practices 3 6 5

This course involves practice in welding the various materials to meet certification standards. The student uses various tests including the guided bend and the tensile strength tests to check the quality of his work. Emphasis is placed on attaining skill in producing quality welds.

Prerequisites: WLD 1120, WLD 1121, WLD 1123, WLD 1124.

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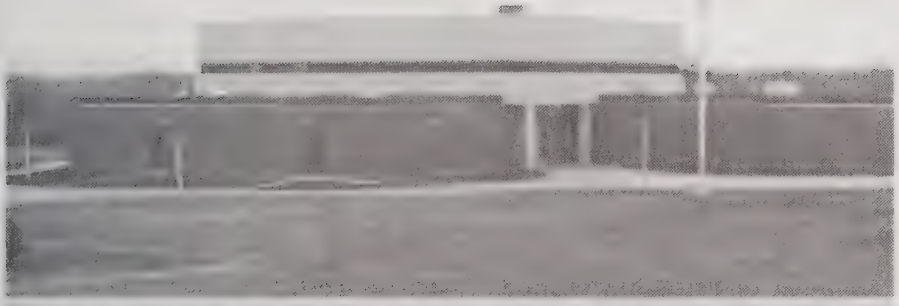

SURRY COMMUNITY COLLEGE

1974

1975

1976

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